PHARMACY RESIDENCY
POST GRADUATE YEAR TWO (PGY-2)

PHARMACY OUTCOMES & HEALTHCARE ANALYTICS

VA Sierra Pacific Network (VISN 21)
Reno, Nevada

Accredited by the
American Society of Health-System Pharmacists

RESIDENCY PROGRAM GUIDE
2019-2020

Scott Mambourg, PharmD, BCPS, AAHIVP
VISN 21 Pharmacy Executive and PGY-2 Residency Director
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Welcome Statement
VA Sierra Pacific Network (VISN 21)
975 Kirman Ave (10N21R)
Reno, NV 89502

I would like to take this opportunity to welcome you to the PGY2 Pharmacy Outcomes and Healthcare Analytics Residency Program at the VA Sierra Pacific Network. You are entering a special portion of your pharmacy career. Residency training is special since only about 10-15% of all pharmacy college graduates pursue this career path. An even smaller number of PGY1 Residents go on to do a PGY2 program.

The purpose of the PGY2 residency at the VA Sierra Pacific Network is to prepare clinicians and analysts for positions that focus on evidence-based therapeutics and practice applied to small and large populations of patients. The residency will encourage each resident to intellectual and personal development and foster the development of lifelong learners committed to advancing the profession of pharmacy. Your preceptors will assist and guide you in getting the greatest benefit from each experience. Goals and objectives will be set; however, I am confident that you will strive to exceed these expectations.

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. Perform effective direct patient care on high-risk or other target patients using developed analysis tools as part of a population management strategy.
8. Contribute to the body of pharmacotherapy knowledge by conducting outcomes-based research or quality improvement projects with the assistance of analysis tools.

The year as a resident, you should be challenged and busy. I am confident that through teamwork we will all benefit greatly by your residency training. The faculty members are available to assist you in reaching your highest potential. I look forward to working with you, watching your growth, and subsequently seeing your professional career develop as our colleagues.

Sincerely,

Scott Mambourg, PharmD, BCPS, AAHIVP
VISN 21 Pharmacist Executive and PGY2 Residency Program Director
Introduction to VISN 21

VA Sierra Pacific Network (VISN 21)
VA Sites of Care by Health Care System

VISN 21, also known as Veterans Integrated Service Network 21, is one of 18 health care service Networks in the Veterans Health Administration (VHA). The Director, VA Sierra Pacific Network, serves as the Chief Executive Officer of this Network and reports to the Deputy Under Secretary for Health for Operations and Management (10N), VA Central Office, Washington, D.C. The mission of the VA Sierra Pacific Network is to honor America’s Veterans by providing exceptional health care that improves their health and well-being. The vision is to continue to be the benchmark of excellence and value in health care and benefits by providing exemplary services that are both patient-centered and evidenced based. This care will be delivered by engaged, collaborative teams in an integrated environment that supports learning, discovery and continuous improvement. It will emphasize prevention and population health and contribute to the Nation’s
well-being through education, research and service in national emergencies. Our core values reflect the fundamental characteristics of all the Network activities: Trust, Excellence, Respect, Compassion and Commitment.

The VA Sierra Pacific Network strategy for excellence begins with the VA Guiding Principles and VA Core Values established by the Secretary, Department of Veterans Affairs. The Guiding Principles for the Department are to be “people-centric – results-driven – and – forward looking.” These themes affirm our commitment to deliver high quality and accessible care which continue to be integral to the VISN 21 strategic planning paradigm.

- **People Centric**
  - Honor and Serve Veterans and Their Families
  - Embrace VA “ICARE” Values of Integrity, Commitment, Advocacy, Respect, and Excellence
  - Engage, Inspire, and Empower Employees

- **Results Driven**
  - Ensure Improved Access for All Veterans
  - Provide High-Quality Care and Exceptional Client Relationship Management
  - Leverage Technology and Adapt Business Processes with Agility
  - Demonstrate Leadership, Accountability, and Effective Results

- **Forward Looking**
  - Communicate Widely and Effectively and Conduct Systematic Outreach and Collaboration
  - Anticipate Veterans’ Needs and Be Pro-Active in Meeting Them
  - Develop a VA Culture that Is Forward Looking, Innovative, and Veteran-Focused

VISN 21 is geographically diverse in nature and is one of the most challenging service areas in VHA. With over 257,000 square miles of land and literally millions of square miles of ocean separating our sites in the Pacific, access to care often requires extensive travel for enrolled Veterans. VISN 21 serves three states and three U.S. Territories. Within this Network, there are four time zones, including crossing the International Date Line. In addition, VISN 21 operates the only VHA direct patient care activity located in a foreign country (Manila, Philippines). VISN 21 sites of care are located in Nevada, central/northern California, Hawaii, the Philippines, and the vast Pacific Rim including Guam, American Samoa, and the Commonwealth of the Northern Marianas Islands (CNMI).

As of fiscal year (FY) 2016, VISN 21 has over 460,000 veterans enrolled to receive care, with services provided to over 300,000 veterans. VISN 21 operates 1575 beds, spread amongst hospitals, nursing homes (Community Living Center), domiciliary and psychiatric rehabilitation programs. Over 3.5 million outpatient visits are provided each year. The VISN has 57 Community Based Outpatient Clinics (CBOCs) and employs over 14,000 with a budget of approximately $6 billion.
The eight VA medical centers/health systems listed below manage over one hundred care sites:

- VA Central California Health Care System
- VA Northern California Health Care System
- VA Pacific Islands Health Care System
- VA Palo Alto Health Care System
- VA Medical Center (VAMC), San Francisco
- VA Sierra Nevada Health Care System
- VA Southern Nevada/Las Vegas Health Care System
- VA Regional Office/Outpatient Clinic (VARO/OC), Manila

All seven VISN 21 health care systems are highly affiliated with premier academic institutions and VISN 21 ranks first in VHA Grant Research funding. Education and research are important components of the VHA mission. VISN 21 is recognized for excellence in the training of future health care providers, and is renowned for conducting cutting edge clinical research addressing global challenges which are a result of military and combat experiences. VA Sierra Pacific Network is affiliated with University of California, San Francisco; University of California, Davis; Stanford University; University of Hawaii; and University of Nevada, Reno.

To gauge success in care and service delivery, VISN 21 monitors and evaluates many metrics and measurements of success. The true hallmark of success in a Veteran-centric organization is high scores in Veteran patient satisfaction. For inpatient satisfaction, VISN 21 has experienced improvements in many areas and exceeds the VHA national average in many categories. VISN 21 has utilized system improvement concepts to enhance communications, patient flow and discharge processes. VISN 21 hosts the largest number of Centers of Excellence in VHA, receives the most research funding in VHA, and has expansive and collaborative relationships with its Department of Defense partners. VISN 21 is on par nationally with inpatient and outpatient satisfaction measures, and often exceeds the VHA national average. VISN 21 has ranked number 4 among all VISNs for best places to work based on the most recent All Employee Survey.

VISN 21 PBM employees are permitted to work at any of the seven VISN 21 healthcare facilities located in Nevada, Northern California, or Hawaii. Total VISN staff includes more than 60 individuals. The VISN Pharmacy Benefits Management (PBM) Group is headquartered at the VA Sierra Nevada Healthcare System in Reno, Nevada, with additional employees of the PBM located in Martinez, California and McClellan, California. PBM and VISN employees work virtually and are associated with VISN medical centers. The VISN 21 PBM, with which the residents will primarily work, are led and managed by the VISN 21 Pharmacy Executive (who is a professionally competent, legally qualified pharmacist) and is an integral part of the health-care delivery system throughout VISN 21. The PBM and all sub-pharmacies are in compliance with all applicable federal, state, and local laws, codes, statutes, and regulations governing pharmacy practice and provide leadership/participation with other professionals within VISN 21. The pharmacists who make up the PBM staff are essential members of a number of interdisciplinary teams and regularly participate in development of treatment protocol, critical pathways, order sets, measures/metrics, and other systems approaches involving improving patient care. More information about VISN21 can be found at: http://www.visn21.va.gov
VISN 21 Organizational Structure
VISN 21 PBM Staff and Residency Board

Scott Mambourg, PharmD, BCPS, AAHIVP
VISN 21 Pharmacist Executive
VA Sierra Pacific Network, Reno, NV

Joy Meier, Pharm.D, PA-C, BCACP
VISN 21 Chief Health Informatics Officer
VA Sierra Pacific Network, Martinez, CA

Diana T. Higgins, Pharm.D.
VISN 21 Program Manager
VA Sierra Pacific Network, McClellan, CA

Janice Taylor, Pharm.D, BCPS
VISN 21 Data and Program Manager
VA Sierra Pacific Network, Reno, NV

Jennifer Marin, Pharm.D., BCPS
VISN 21 Data Mart Manager
VA Sierra Pacific Network, Houston, TX

Amy Robinson, Pharm.D.
VISN 21 Data Mart Manager
VA Sierra Pacific Network, Palo Alto, CA

VISN 21 PBM Staff Activities

➢ VISN PBM has 4 main pillars
  o Formulary Management
  o Operations
  o Data Warehouse: Workload/Dashboard/Clinical Outcomes
  o Education/Residency

➢ Oversee Operations at the VISN 21 Pharmacies through Pharmacy Leadership Groups
➢ Maintains a Large Clinical Data Warehouse of Patient Specific Information
➢ Develops and implements Quality and Cost Performance Metrics for the VISN with patient specific Reports and Dashboards
➢ Directs activities of the National and VISN Formulary within VISN 21
  o Coordinates development and updates of VISN 21 Drug Use Criteria and maintains VISN web based services
  o Leads activities of the Medication Utilization Management Team such as pharmacoeconomic analysis and development of contract initiatives
➢ Coordinates pharmacy activities with VISN committees, task forces and with executive leadership
➢ Coordinates training programs for pharmacists and non-pharmacists within the VISN 21 PBM

VISN 21 PBM Residency Board Responsibilities

The Pharmacy Residency Committee, chaired by the RPD and composed of residency preceptors, is established for these goals:

1. To assure that each resident meets the goals and objectives of the pharmacy practice residency over the course of the year.
2. To assess and improve the residency program, including the program manual, required activities and elective offerings.
3. To assure that the residency surpasses the standards as set by the ASHP and the Department of Veterans Affairs.
4. To foster the resident’s professional and personal growth.
5. To assure a balance between clinical activities/learning and administrative/staffing is maintained throughout the residency year.

The Board will meet at least quarterly to review quarterly reports, rotation evaluations, project proposals, and evaluate resident project progression. Residents are asked to meet with the residency board quarterly to review their evaluations, as well as discuss the residents’ progress, areas for improvement, project, career goals and feedback about the residency program. The Board will also approve/disapprove the chosen electives for each resident.

Board members take an active role in the professional development of the residents.

**Residents are expected to take an active role in meeting their program goals and assessing their rotations.**
The VA Sierra Nevada Health Care System (VASNHCS) provides primary and secondary care to a large geographical area that includes 21 counties in northern Nevada and northeastern California. The Reno campus is the site of the Ioannis A. Lougaris VA Medical Center, a fully accredited (Joint Commission) medical center that operates 64 hospital beds and 60 Transitional Care Unit beds. VASNHCS provides a broad array of inpatient care and outpatient services in medicine, surgery, neurology, mental health, pharmacy, interventional radiology, alcohol/drug treatment, ophthalmology, audiology/speech pathology, dental care, and home care. The hospital offers a wide range of diagnostic services, including MRI, CT, ultrasound, nuclear medicine, as well as diagnostic cardiac catheterization services. Geriatrics and Extended Care includes rehabilitation, skilled care (post-acute), palliative care, respite care, geriatrics evaluation, transitional care, and long-term care. Tertiary and unique specialty care not available within VASNHCS is supported through a variety of means, including referrals to community hospitals and VA Medical Centers in San Francisco and Palo Alto, California. Access to outpatient primary and mental health care is also available through community clinics: the VA Sierra Foothills Outpatient Clinic in Auburn, California, the VA Carson Valley Outpatient Clinic in Minden, Nevada, and the newest clinic, the VA Lahontan Valley Outpatient Clinic in Fallon, Nevada.

The major academic affiliations for VASNHCS are the University Of Nevada School Of Medicine, Reno, and the East Bay Surgical Program at the University of California, San Francisco. Approximately 30 medical, surgical, and psychiatry residents rotate annually through VASNHCS, as well as approximately 12 pharmacy students through a partnership with the Idaho State University and University of Southern Nevada Schools of Pharmacy. Additionally, there are six pharmacy residents through the American Society of Health Systems Pharmacists (ASHP) residency program. A number of students, interns, and residents from ancillary services and other academic affiliations also receive training at VASNHCS.

The Medical Center has a commitment to research with extensive pharmacy involvement. There is a dedicated research pharmacist who is currently Principal Investigator (PI) on two ongoing studies. In addition, investigational medications are managed for approximately 26 other active studies. The VASNHCS Research program has a budget of approximately $1.3m, with 34 projects in neurology, oncology, surgery, cardiology, pulmonary medicine, and pharmacy.

The Medical Center has training programs in five allied health fields, has its own American Psychology Association accredited predoctoral psychology training program, and conducts residency training programs in internal medicine, general surgery, neurology, pharmacy, and oncology.
The progressive Pharmacy Service consists of 45 full-time employees. Formal educational programs are offered for pharmacy residents and Pharm. D. students as well as residents and students from Internal Medicine, Family Practice, Surgery, Physician Assistant, and Nursing Programs. Inpatient Pharmacy distribution is accomplished with extensive technology and technician support to maximize pharmacist input on patient care decisions. Hospital-wide unit dose and intravenous admixture services are standard. Pharmacists are actively involved in rounds, patient drug therapy design, implementation, and monitoring, inpatient anticoagulation monitoring, pharmacokinetics, TPN monitoring, ID, geriatrics, discharge counseling, drug information, DUE/ADR reporting, and many other patient care functions. Outpatient Pharmacy distribution is accomplished by state-of-the-art robotics (CMOP) combined with local computer order entry. All pharmacists have prescriptive authority; including active patient management in a variety of primary are areas. In addition, pharmacists are primary care providers for the following patient care activities: anticoagulation, hypertension, ID, H-Pylori, diabetes, dyslipidemia, triage, HIV, GI and oncology clinics.

Pharmacy Students:
VISN 21 Pharmacy Services are affiliated with a number of colleges of pharmacy. All six VISN medical centers have pharmacy student affiliations. Within VASNHCs affiliation agreements exist between the VA and Idaho State University, University of Southern Nevada, University of Colorado, and Creighton University. Approximately 10-15 advanced practice clerkships (APPE) students rotate at this site per year. Other medical centers have affiliation agreements and faculty from UCSF and UOP.

Residency Programs:
The VASNHCs has six ASHP Accredited Pharmacy Practice (PGY1) (two with a focus on rural health), one PGY2 in Mental Health and one PGY2 in Geriatrics, and two ASHP Accredited Pharmacy Outcomes and Healthcare Analytics (PGY2) residency positions. All seven VISN 21 medical centers have ASHP Accredited PGY1 programs. Six PGY2 programs are offered or under development in VISN 21; Administration, Psychiatry, Geriatrics, and Pharmacy Outcomes and Healthcare Analytics.
PGY-2 Pharmacy Residency General Information
Pharmacy Outcomes and Healthcare Analytics
VISN 21 Pharmacy Benefits Management (PBM)

VISN 21 Mission
To honor America's Veterans by providing exceptional health care that improves their health and well-being. The VA Core Values -- Integrity, Commitment, Advocacy, Respect and Excellence -- can be summarized in the simple but appropriate acronym: "I CARE."

VA Sierra Pacific Network PBM Mission and Vision
Mission: To improve the quality and provision of healthcare to veterans by leveraging best practice outcomes, health analytics and safe, effective and medically necessary use of medications.

Vision:
- We will build relationships and collaborations with all members of the healthcare team.
- We will control costs while maximizing the value of medications for our veterans.
- We will utilize the most evidenced-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.
- We will be an employer of choice for pharmacists and supportive staff by providing a compassionate, progressive work environment.
- We will create a practice environment that fosters education, research and professional development.

VASNHCS Mission
“Providing World Class Care and Service to America’s Heroes”

VASNHCS Pharmacy Service Mission and Vision
Mission: To provide the highest quality care to veterans by ensuring safe, effective, and medically necessary use of medications.

Vision:
- We will be an essential component of the patient focused Health Care Team.
- We will create a practice environment that fosters education, research and professional development.
- We will advance the use of innovative technologies to ensure consistent, accurate and reliable medication distribution, education and information systems.
- We will provide pharmaceutical services during national emergencies, disasters and other events that adversely affect our veterans.
- We will be an employer of choice for pharmacists, pharmacy technicians and supportive staff by providing a compassionate, progressive work environment.
Program Purpose
The purpose of the VA Sierra Pacific Network (VISN 21) PGY2 Pharmacy Outcomes and Healthcare Analytics Residency Program is to develop clinically proficient healthcare data analysts who will improve the quality, and outcomes of patient care services. The Residency Program promotes the integration of information technology, informatics, and data analysis with the practice of evidence-based medicine and medical treatments and process improvement.

Program Vision
Healthcare data analytics is an evolving area within the healthcare industry. Over the next five years, as the prevalence of electronic health records and the integration of health systems increases as well as the need to monitor health outcomes, the demand for clinically competent healthcare data analysts will be great. The VA Sierra Pacific Network (VISN 21) 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.

Program Outcomes

Educational 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. Perform effective direct patient care on high-risk or other target patients using developed analysis tools as part of a population management strategy.
8. Contribute to the body of pharmacotherapy knowledge by conducting outcomes-based research or quality improvement projects with the assistance of analysis tools.

Elective Outcomes:
1. Demonstrate advanced skills in working with a specific technology or automation product (such as Cube Building, Clinical Reminders, etc.).
2. Utilize added knowledge and skills to enable the application of contemporary quality methodology to the management of pharmacy services.
3. Demonstrate skills required to function in an academic setting.
Qualifications of the Resident

Pharmacist Licensure
All pharmacy residents are expected to possess full, current, and unrestricted licensure to practice pharmacy in a State, Territory, or Commonwealth of the United States (i.e. Puerto Rico), or the District of Columbia. The pharmacist must maintain current registration if this is a requirement for maintenance of this full, current, or unrestricted licensure.

Additional Qualifications and Application
1. Residents must be a graduate of a degree program in pharmacy from an approved college or university. The degree program must have been approved by the American Council on Pharmaceutical Education (ACPE), or prior to the establishment of ACPE, have been a member of the American Association of Colleges of Pharmacy (AACP). Verification of approved degree programs may be obtained from the American Council on Pharmaceutical Education, 311 West Superior Street, Suite 512, Chicago, Illinois 60610, Phone (312) 664-3575
2. Completion of a first-year pharmacy practice residency or an equivalent experience approved by ASHP, 3 years of clinical experience minimum, is required to be considered for this PGY-2 program. Applicants must either be in the process of completing, or have completed a first-year pharmacy practice residency or an equivalent experience approved by ASHP prior to application to the residency program.
3. Each applicant must enroll in the ASHP Resident Matching Program through the online application process known as (PhORCAS) or partake in the Early Commitment process (Appendix I) in order to be considered for a resident position. Residents and the program will participate in and adhere to the rules of the Resident Matching Program (RMP) process
   a. Applications are typically due in early January and interviews are conducted in mid-February.
   b. Residency applicant qualifications will be evaluated by the residency program director (RPD) through an established, formal procedure that includes an assessment of the applicant’s clinical knowledge and critical thinking skills, as well as an assessment of baseline knowledge relevant to the Pharmacy Outcomes and Healthcare Analytics residency. In addition, the ability to achieve the educational goals and objectives for the PGY-2 selected for the program will be evaluated.
   c. The criteria for assessment and acceptance is provided to all preceptors by the RPD and are assessed during the interview process. On-site interviews are preferred, however, remote interviews may be considered.
   d. The formal, criteria-based process to evaluate and rank program applicants is in place (Appendix II)
   e. The RPD will provide residents with a letter outlining their acceptance to the program and terms and conditions of the appointment will be provided by Human Resources staff. (Attachment F) Documentation of resident acceptance will be on file prior to the beginning of the residency year.
4. More information can be found at the VASNHCS residency website.
Obligations of the Program to the Resident

Program Description
This residency is a 12 month program designed to meet the standards set forth by the ASHP for Post-Graduate Year Two Residencies (PGY-2) and meets the ASHP Regulations on Accreditation of Pharmacy Residencies. Completion of the residency leads to a Certificate of Residency. The role of the pharmacy resident is to develop into clinically competent pharmacists capable of managing small and large populations of patients, primarily through longitudinal experiences in data management, pharmacoeconomics, and health outcomes. The PGY2 resident provides specialized support to promote the integration of information technology, informatics, and data analysis with the practice of evidence-based medicine and medical treatments for VISN 21 PBM projects. Residents are under the general supervision of the residency director, and under the preceptorship of the residency director and other assigned personnel. Under such oversight, the resident will design computerized reports and interfaces for various demographics; will demonstrate project development, implementation, and management skills; will initiate and implement clinical programs to enhance the efficiency of patient care; will monitor the local Veterans Integrated Service Network (VISN) performance measures and metrics; will provide education to health care professionals and participate in clinical research.

The program is accredited in association with the VASNHCS PGY-1 Pharmacy Practice Program, though the PGY-2 residents will work with clinicians, interdisciplinary teams, and patients throughout VISN 21. The primary location for the residency is the VISN 21 satellite office located in Reno, NV. The medical center and pharmacy affiliated with the program (VASNHCS) is accredited by Joint Commission and the affiliated pharmacy schools are accredited by ACPE. The management and professional staff of both the VASNHCS and VISN 21 PBM are committed to seeking excellence in patient care, have demonstrated substantial compliance with professionally developed and nationally applied practice and operational standards, and have sufficient resources to achieve the educational goals and objectives selected for the residency program.

Minimum Qualifications of the Program Director and Preceptors

1. Residency Program Directory (RPD)
   o Must be a licensed pharmacist with demonstrated expertise in Pharmacy Outcomes and Healthcare Analytics.
   o Must have completed an ASHP-accredited PGY-2 residency in a relevant advanced practice area followed by a minimum of 3 years of practice or experience equivalent in this area. Alternatively, the RPD may have an equivalent experience (5+ years relevant experience) with demonstrated mastery of the knowledge, skills, attitudes, and abilities expected of one who has completed a PGY-2 area in this residency.
   o Have board certification in a relevant specialty
   o Maintain active practice in the pharmacy outcomes/healthcare analytics practice area
   o Maintain a sustained record of contribution and commitment to pharmacy practice
   o Have documented evidence of their own ability and interest to teach effectively (i.e. through resident evaluations)
   o Have demonstrated ability to direct and manage a pharmacy residency, through previous involvement in an ASHP-accredited program, management experience, or previous academic experience as a course coordinator.
2. **Preceptors**
   - Must be a licensed pharmacist and have completed an ASHP-accredited PGY-2 residency followed by a minimum of one year of pharmacy practice in a relevant area. Alternatively, preceptors without a PGY-2 residency must demonstrate mastery of knowledge, skills, attitudes, and abilities expected of one who completed a PGY-2 in this area.
   - Must have training and experience in pharmacy outcomes and analytics (or other relevant area in the case of elective rotations) and maintain a continuity of practice in this area and be practicing within it during resident training.
   - Must have a record of contribution and commitment to pharmacy practice as per ASHP Preceptor Qualification Guidelines.
   - Must have training and experience in pharmacy outcomes and analytics (or other relevant area in the case of elective rotations) and maintain a continuity of practice in this area and be practicing within it during resident training.
   - Must demonstrate a desire and aptitude for teaching that includes mastery of the four preceptor roles fulfilled during clinical problem solving (instructing, modeling, coaching, facilitating).
   - Must demonstrate an ability to provide criteria-based feedback and evaluation of resident performance and pursue refinement of their teaching skills.
   - If non-pharmacist preceptors are utilized, a pharmacist preceptor works closely with the non-pharmacist preceptor to select educational goals and objectives for the learning experience and participates actively in the criteria-based evaluation of the resident’s performance.

**Continuous Professional (Preceptor) Development**

Preceptors will individually develop a CPD plan. This will included but is not limited to:

1. Participation in at least ONE resident CE program annually
2. Demonstration of at least 20 hours of annual continuing education that is related to their content area. This can be live or written accredited program, VA learning opportunities or similar programs that are recognized by a national certification/accreditation body.
3. Preceptors will routinely practice in their training area; demonstrate a desire to train residents and an excellence in teaching skills. Preceptors will pursue the four core areas of education:
   - Direct instruction
   - Modeling
   - Coaching
   - Facilitating.
4. Preceptors are evaluated by the resident on completion of a learning experience. Any deficiencies will be discussed and additional training will be provided as deemed necessary in order to meet the goals and objectives of the learning experience.
5. Preceptors will perform an initial needs assessment via the [VISN 21 Preceptor Development SharePoint Site](#). The RPD will compile the responses and address potential weaknesses in the residency program and preceptor qualifications through customization of preceptor development training. Preceptors will fill out a similar, annual assessment that will allow the preceptor to track improvements and additional areas that require addressing.
6. The following is an example of a Preceptor-in-Training Development plan, which also stands as an initial Preceptor Development Plan:

**Preceptor in training:**
**Learning Experience:**
**Mentor:**
Date: ________________  Met with Preceptor and Mentor to discuss and implement plan
Quarterly until achieved

<table>
<thead>
<tr>
<th>Initial Preceptor Development Plan:</th>
<th>Anticipated Completion Date X = meets</th>
<th>Responsible Person</th>
<th>Progress</th>
</tr>
</thead>
</table>

Review of ASHP Preceptor Qualifications
Does not fully meet the following qualifications of preceptor:

1. **“Recognition in the area of pharmacy practice for which you serve as a preceptor:**
   Options for compliance include:
   - Board Certification
   - Advanced scope of practice with prescribing privileges (optional)
   - Sustained exemplary job performance
   - Ongoing service and subject matter knowledge in the pharmacy-practice related area

2. **“An established, active practice for which you serve as preceptor.”**
   Options for compliance include:
   - Contribution to the development of clinical or operational policies/protocols
   - Contribution to the creation/implementation of a new clinical service or service improvement initiative
   - Appointments to drug policy and other committees of the organization

3. **“Ongoing professionalism…”**
   Options for compliance include:
   - Active service in professional organization
   - Presentations/posters/publications in professional forums
   - Poster/presentation/project co-author for pharmacy students or residents at professional meeting
   - Moderator or evaluator at regional conference or other professional meeting
   - Routine in-service presentations to staff
- Faculty appointment or pharmacy student preceptor
- Providing preceptor development topics at VISN21
- Participation in health fairs, wellness, disease prevention…
- Participation in research

Review of Learning Experience description with mentor and RPD
- Including preceptor roles

Review of PharmAcademic requirements with RPD

**Review of Preceptor Development Resources**
- Annual Preceptor Development InfoPath
- Ongoing Preceptor Development series during RAB meetings
- Access to ASHP Preceptor Playbook
- Pharmacist Letter Preceptor Development series through College of Pharmacy Affiliations

Preceptor Self-Assessment (Pre 1st learning experience)

<table>
<thead>
<tr>
<th>Follow up after first rotation or annually if no resident</th>
<th>Discussion/Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Discuss learning experience</td>
<td></td>
</tr>
<tr>
<td>- Review evaluations by the preceptor and by the resident</td>
<td></td>
</tr>
<tr>
<td>- Preceptor self-assessment</td>
<td></td>
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</tbody>
</table>

**Update on ASHP Preceptor Qualifications**
Does not fully meet the following qualifications of preceptor:
2. “Recognition in the area of pharmacy practice for which you serve as a preceptor:
Options for compliance include:
- Board Certification
• Advanced scope of practice with prescribing privileges
• Sustained exemplary job performance
• Ongoing service and subject matter knowledge in the pharmacy-practice related area

3. “An established, active practice for which you serve as preceptor.”
Options for compliance include:
• Contribution to the development of clinical or operational policies/protocols
• Contribution to the creation/implementation of a new clinical service or service improvement initiative
• Appointments to drug policy and other committees of the organization

4. “Ongoing professionalism…”
Options for compliance include:
• Active service in professional organization
• Presentations/posters/publications in professional forums
• Poster/presentation/project co-author for pharmacy students or residents at professional meeting
• Moderator or evaluator at regional conference or other professional meeting
• Routine in-service presentations to staff
• Faculty appointment or pharmacy student preceptor
• Providing preceptor development topics at JAHVH
• Participation in health fairs, wellness, disease prevention…
• Participation in research

<table>
<thead>
<tr>
<th>Preceptor Status</th>
<th>☐ Continue as Preceptor-in-training ☐ Change status to Preceptor</th>
</tr>
</thead>
</table>

**Ongoing preceptor development plan**
• Strengths
• Areas for improvement
• ASHP Preceptor Qualifications review

**Program Evaluation and Improvement**
Program evaluation and improvement activities will be directed at enhancing achievement of the program’s outcomes. The residency program director (RPD) will evaluate potential preceptors based on their desire to teach and their aptitude for teaching, and will provide preceptors with opportunities to enhance their teaching skills. The residency program director (RPD) will devise and implement a plan for assessing and improving the quality of preceptor instruction. Consideration will be given to
the resident’s documented evaluation of preceptor performance as one measure of preceptor performance. At least annually, the residency program director (RPD) will use evaluations, observations, and other information to consider program changes. The resident is responsible for completing a Continuous Quality Improvement (CQI) assessment in the final month of the rotation. The purpose is to identify specific areas of the residency that may be improved and to continuously re-evaluate the educational outcomes, goals, and objectives evaluated throughout the residency to ensure they are up-to-date and consistent with resident experiences. The program aims to utilize the available learning experience to facilitate achievement of the program’s educational goals and objectives. The educational outcomes, welfare of the resident, and the welfare of patients are to be in no way compromised by excessive reliance on residents to fulfill service obligations. The program will also provide sufficient professional and technical staff complement to ensure that appropriate supervision and preceptor guidance is available to all residents. However, the program encourages regular feedback from residents if they feel the program is deficient in any of these areas. Additionally, the PBM Staff/Residency board will meet and self-assess on a regular basis to ensure these goals are being met.

Tracking of Graduates
The residency program director (RPD) will track employment and professional development of residency graduates to evaluate whether the residency produces the type of practitioner described in the program’s purpose statement. Periodically, former residents will be requested to complete an ASHP Preceptor Form which will be stored electronically on the VISN 21 Preceptor Development SharePoint Site.

Meeting with the Residency Program Director
Each resident is welcome at any time to discuss issues with Dr. Mambourg. These can be individual discussions or group discussions. It is best to schedule a time via Outlook to arrange these meetings. However, if a need arises to discuss a topic regarding the residency, the resident should not hesitate to come into the RPD office for a discussion. Dr. Mambourg will involve the PGY2 residents in every aspect of his position as VISN 21 Pharmacy Executive by invitation to participate in activities of his daily and weekly meeting and project schedule. As a result, PGY2 residents will likely have daily contact with the RPD in this program.

Customized Training Plan
The generalized residency plan will be customized to address strengths, areas for improvement, strategies for improvement, plans for residency individualization based on resident interests, status of assigned projects, residency project assessment, overall assessment, duty hours, and a global assessment of resident progress in relation to program goals and objectives. The training plan will be customized based upon an assessment of the resident’s entering and ongoing knowledge, skills, attitudes, and abilities and the resident’s interests. The Customized Training Plan (CTP) will be reviewed quarterly and updated as needed to meet unaccomplished goals, or modified if one or more of the required educational objectives is performed and judged to indicate full achievement. The resulting CTP will be tailored according to identified strengths/opportunities for improvement and will maintain consistency with the program’s purpose and outcomes and will not interfere with the achievement of the program’s stated educational goals and objectives. The CTP and any modifications to it, including the residents’ schedule, will be shared with the resident and appropriate preceptors. The CTP will contain documented, individualized sets of educational outcomes, goals,
and objectives that are derived from the program’s documented outcomes, goals, and objectives (as well as remedial actions). Additional program outcomes, goals, or objectives will reflect the site’s strengths.

**Benefits**

*General:* Parking, laboratory coats, office space, and office keys are furnished. Computers are available for use by the residents in the pharmacy resident’s office at the VISN satellite office and in the resident office at the VASNHC medical center. Use of online resources is available on the intranet. Preceptors will provide education and any necessary passwords to use these resources.

*Pay:* Residents are paid at the rate of $44,522 per year. The resident’s stipend is based on a 40-hour workweek; however, the very nature of a residency training program is such that additional time is required to complete training assignments. ACGME guidelines for duty hours must be observed (see “Duty Hours”). No additional compensation is available, though dual appointment opportunities may be available through the VASNHC pharmacy as funding and need allow. Funding for travel and related meeting expenses are reimbursed for the one required state/regional and one required national meeting.

*Attendance:* The residency is a full-time temporary appointment of 12 months in duration. The resident is expected to be onsite for at least 40 hours per week and to perform activities related to the residency as necessary to meet the goals and objectives of the program. The resident will be scheduled for rotations and staffing assignments and is expected in the location as scheduled. Additional hours are expected to complete assignments and projects in a timely manner. When the resident will not be onsite during normal duty hours, the program director and preceptor must approve the time off or away and procedures for leave must be followed. At times, the resident will be expected to attend other residency-related conferences or experiences off-site during regular working hours. If an extended absence occurs (i.e. extended family or sick leave), extension of the residency program may be necessary. Opportunity to extend the program with pay will depend on the decision of the VA regarding extending the funding. For more information see Appendix IV: Extended Leave of Absence. Unexcused absences may be dealt with under the Residency Disciplinary Actions and Dismissal Policy as necessary.

*Annual Leave:* Residents earn annual leave at the rate of 4 hours per 2 week pay period. Annual leave must be requested electronically, as far as possible in advance, via the VISTA computer system. An email request should also be sent to the residency program director with the date(s) in the subject line. Scheduled leave must be approved by the Residency Program Director (RPD). Approval of the preceptor (if applicable) should be obtained prior to submitting leave request to the Residency Director. The resident should consider what impact the use of leave has on their educational experience before scheduling.

*Authorized Absence:* Administrative or authorized absence to attend professional meetings is granted at the discretion of the Residency Program Director. Authorized absence must be requested electronically at least two weeks prior to the scheduled event via the VISTA computer system.

*Sick Leave:* Residents earn sick leave at the rate of 4 hours per 2 week pay period. Sick leave for scheduled doctor’s appointments or elective procedures must also be electronically requested two
weeks in advance if at all possible. The RPD and, if applicable, current preceptor should be notified of any unscheduled absence due to illnesses prior to the scheduled tour of duty. Entry of leave into the computer system should be completed upon the resident's return to work and timekeeper notified.

**Family Friendly Leave (CB):** Family leave or bereavement leave policies indicate that each employee can use up to 103 hours of family leave each year. Family leave must be requested electronically prior to planned event or immediately upon employee return if absence due to an emergency. RPD approval is required as is the current preceptor, if applicable. Family leave will be deducted from the sick leave balance.

**Emergencies:** Personal emergencies/accidents during tour of duty should be reported to the RPD and current preceptor, if applicable, as soon as possible so that appropriate action can be taken.

**Inclement Weather:** The hospital’s inclement weather policy is that all personnel are required to report to work in the event of inclement weather. There may be a small allowance for travel delays due to severe weather; notify your RPD if this might be the case and enter appropriate leave upon arrival to work. If you are entirely unable to report for duty due to weather conditions, you will be charged the appropriate amount of annual leave.

**Holidays:** Residents are not scheduled to work on the paid federal holidays.

**Requirements to Receive Residency Certificate**

It is the responsibility of the program to determine whether a resident has satisfactorily completed the requirements of the residency. Any resident who fails to meet the accepted standards of the residency program will not be issued a certificate. Knowingly presenting a certificate of completing the residency when, in fact, inadequate achievement has occurred, can result in revocation of the accreditation of the residency by ASHP. Clearly, this makes the issuing of a residency certificate an important event. Throughout the course of the residency it will be made clear whether or not objectives are being met. Some individuals may require remedial actions. If remedial actions taken by the resident are insufficient the residency certificate will not be issued. This determination will be made jointly by the resident, Residency Program Director, Residency Board, and the Chief of Pharmacy (if applicable).

- Satisfactory completion of all rotations and required activities. If a rotation is not satisfactorily completed, appropriate remedial work must be completed as determined by the preceptors and program director
- Completion of 2080 hours of training
- Compliance with all institutional and departmental policies
- Achieved for Residency on all Critical Elements and Satisfactory Progress (s/p) on all remaining goals at the end of the residency (see attached Excel below that identifies the Critical Elements and serves as a grid for evaluation/tailoring for the Quarterly CTP)
- Completion of all assignments and projects as defined by the preceptors and RPD
- Completion of a residency project with a draft manuscript submitted in the journal format of choice to the Residency Program Director no later than the day of the Residency Research Conference
• Attend at least one professional state or regional meeting and one national meeting (must be pharmacy-related) as approved by the RPD
• Participate in recruiting activities for the residency
• Contribute to optimal patient care and achieve the mission and goals of VISN21, the VISN 21 PBM and the VASNHCS Pharmacy Service

The residency certificate will indicate the program’s accreditation by ASHP, that it is issued in accordance with the provisions of the ASHP Regulations on Accreditation of Pharmacy Residencies, and will be signed by the RPD and CEO of the organization.

Critical Elements Grid for Quarterly CTP

Obligations of the Resident to the Program

Obligations
• The residency is a full-time obligation
• The resident will be committed to attaining the program’s educational goals and objectives and will support the organization’s mission and values.
• The resident’s primary professional commitment must be to the residency program.
• The resident shall be committed to the values and mission of the training organization.
• The resident shall be committed to making active use of the constructive feedback provided by the residency program preceptors.

Dress Code
In brief, the dress code requires that residents dress in an appropriate manner. Typically, this entails professional attire & footwear during normal duty hours Monday-Friday, 8:00 a.m. – 4:30 p.m. (however, on Fridays allowance for business casual attire is made). During some rotations and residency events, additional professional wear may be necessary. Any specific problems with attire will be discussed with the Residency Advisory Board and/or the Residency Program Director. Lab coats will also be optionally provided during residency training, particularly if the resident has interest in actively participating in patient care activities (during elective rotations, etc.) If borrowed, these coats are to be returned at the completion of training.

Tour of Duty
Tour of duty for all residents is 8:00 a.m. to 4:30 p.m., Monday through Friday, primarily at the VISN 21 satellite office. Some rotations may require a change in tour and location. This 8.5 hour tour of duty additionally allows for a 30 minute lunch break. The RPD and time keeper must be informed of all changes in tours of duty prior to the change being made.
**Duty hours** are defined as all clinical, managed care, and academic activities related to the program; i.e., patient care, administrative duties, the provision for transfer of patient care, time spent in-house during call activities, time spent working on analytics/population management or pharmacoeconomic activities, and scheduled events, such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.

1. Duty hours must be limited to 80 hours per week, averaged over a four-week period.
2. Residents must be provided with one day in seven free from all educational and clinical responsibilities, averaged over a four-week period.
3. Adequate time for rest and personal activities must be provided. This should consist of a 10-hour time period provided between all daily duty periods.

**Moonlighting:** Moonlighting at VASNHCS or outside of VASNHCS is permitted but must meet the above duty hour requirements. Resident moonlighting hours will be documented in PharmAcademic or during evaluations at regularly scheduled intervals. If the resident, preceptors, or Residency Program Director finds that the resident’s judgment is impaired or they are unable to meet the requirements of the PGY-2 program, individual adjustments to permitted moonlighting hours may be made.

**Fatigue:** Residency program directors must educate residents and preceptors to recognize signs of fatigue and sleep deprivation, and adopt processes to manage negative effects of fatigue and sleep deprivation to ensure safe patient care and successful learning.

**Source:** Pharmacy Specific Duty Hours Requirements for the ASHP Accreditation Standards for Pharmacy Residencies.

**Professional Practice and Development**

Pharmacy residents are representatives of the VISN 21 PBM and when at the VASNHCS, the Pharmacy Department, at all times. It is important that high standards of professional conduct are upheld at all times, including professional meetings.

Professional development of residents is enhanced through membership and participation in local and national organizations. Membership in the American Society of Health-system Pharmacists (ASHP) is required. Residents are encouraged to become members of the Nevada Society of Health-Systems Pharmacists (NVSHP) and American College of Clinical Pharmacy (ACCP). Residents are **required** to attend one state or regional pharmacy organization meeting (i.e. Western States Residency Conference) and one national pharmacy organization meeting (i.e. ASHP Midyear Meeting) and are encouraged to attend local Board of Pharmacy meetings.

Activities of the residents must be coordinated with the preceptors in order that appropriate and adequate pharmaceutical care is provided. Residents are not expected to practice independently from the pharmacists. Utilizing the knowledge, skills, and abilities of the preceptors to become more proficient at pharmacy practice is critical to development. Communication with preceptors, pharmacists, technicians, and other miscellaneous VISN staff is additionally important to resolve various problems that will arise throughout the residency year. If the resident cannot solve a specific problem via routine channels, the relevant preceptor or supervisor should be contacted, including calling a preceptor at home. Residents can assist the Pharmacy Section by inquiring if the way things
are done can be improved. Challenging the staff is an important contribution to our constantly ongoing improvement process.

Confidentiality
Development of professional ethics and awareness of a patient’s need for confidential and private counseling are important components of clinical education. Residents will receive training on HIPAA guidelines. It is their responsibility to never mention patients by name at inappropriate times or discuss patients with team members in areas where information may be overheard (ex. while in stairwells or on elevators). Paperwork containing patient or employee personal information must be placed in appropriate containers for shredding. Emails containing patient information will be sent using encryption and only to parties permitted to receive this information. It is critical that all employees do not leave a computer terminal open for access by other individuals. If residents find themselves in a position where patient confidentiality may be compromised, they should remove themselves from the situation.

The U.S. Government computer system is for official use only. The files on this system include federal records that contain sensitive information. All activities on this system may be monitored to measure network performance and resource utilization; to detect unauthorized access to or misuse of the system or individual files and utilities on the system including personal use; and to protect the operational integrity of the system. Use of this system constitutes your consent to such monitoring. Misuse of or unauthorized access to this system may result in criminal prosecution and disciplinary, adverse, or other appropriate action.

Grievances
Any problem that may arise during the residency should first be addressed by the appropriate preceptor. If the attempts to resolve the problem are unsuccessful, it should be brought to the attention of the residency program director (RPD). If for some reason resolution at that level fails, the Pharmacy Service Manager will have the authority to make the final decision.

Attitude
The resident is expected to demonstrate professional responsibility, dedication, motivation, and maturity with regards to all activities and responsibilities associated with the residency for its entirety. The resident shall demonstrate the ability to work and interact with all staff and patients of the Medical Center in a productive and harmonious manner. Appropriate attire, personal hygiene and conduct are expected at all times. The resident will adhere to all the regulations governing the operations of the Department of Veterans Affairs Medical Center without exception.

Residency Disciplinary Actions and Dismissal Policy
It is not expected that any disciplinary actions will be needed during the residency. However, criteria have been established to avoid making an unpleasant situation more difficult. Each resident is expected to perform in an exemplary manner. If a resident fails to meet the requirements of the program, disciplinary action will be taken. Examples of inadequate or poor performance include dishonesty, repetitive failure to complete assignments, being late for clinical assignments, abuse of annual and/or sick leave, violating VISN 21 or VA policies and procedures, patient abuse, violating ethics or laws of pharmacy practice, and failure to maintain pharmacy licensure. The following sequence of disciplinary actions is outlined:
1. For minor or initial failure to adhere to requirements will result in a verbal counseling by the primary preceptor or the RPD.
2. Residents can be given a formal written warning of failure to meet the requirements of the residency along with actions necessary to remedy the situation for repeated/severe incidents.
3. If the resident continues to exhibit unacceptable professional behavior or is continuing to have substandard performance the resident may be restricted from certain activities or additional assignments can be given as corrective action. The RPD can alter work or rotation assignments after discussion with the preceptor and Residency Advisory Committee.
4. If a resident is late to work the resident may be considered absent without leave and will be charged leave without pay.
5. Repetitive or serious breaches of professional conduct will be documented in writing and forwarded to the Chief of Pharmacy (CoP) if the RPD determines dismissal is an appropriate action. The CoP will decide whether dismissal is necessary after reviewing the situation with the resident, Residency Advisory Committee, and RPD. If dismissal is necessary the proper VA process will be initiated.
6. Written documentation of disciplinary actions will include date discussed; issue and actions required and will be placed in the Resident’s file.

Termination Policy
A PGY1/PGY2 Pharmacy resident may be terminated at the discretion of the Chief of Pharmacy and Residency Program Director for failure to meet the program objectives and requirements as outlined in the PGY1/PGY2 Pharmacy Residency Manual or failure to meet the terms of employment of the Reno VA Medical Center set forth in the Medical Center’s Standards of Ethical Conduct and Related Responsibilities of Employees.

ASHP Accreditation Standards

The ASHP standards for the Pharmacy Practice Residency Program are important for understanding because they are our contract with each resident. The areas and functions in which residents will have involvement are described in the accreditation standards. The supporting guidelines, technical bulletins, and statements for the best practice involving a required aspect of training are available online at http://www.ASHP.org

To ensure training efficiency and effectiveness, the program will use a systems-based approach to training design, delivery and evaluation. It is important to continuously assess individual practice skills, particularly in relation to these ASHP Accreditation Standards for Postgraduate Year Two (PGY2) Pharmacy Residency Programs and the ASHP Regulations on Accreditation of Pharmacy Residencies. Provided below is a link to the generalized PGY2 residency standards as well as to standards for relevant specialized residencies that have been provided by ASHP. As the VISN 21 Pharmacy Outcomes and Healthcare Analytics program is a unique residency, there is currently not an official guide to the standards, goals, outcomes, and experiences offered through this program on the ASHP website. However, we have created a document (Appendix V) that provides a comprehensive list of outcomes and instructional objectives specific to the Pharmacy Outcomes and Healthcare Analytics residency. Additionally, the links directly below provide a list of general ASHP Accreditation Standards and PGY2 Goals and Objectives for Advanced Areas of Practice from which
our goals/objectives were adapted. These, in combination with our drafted document will assist with the Continuous Quality Improvement (CQI) (Appendix III) that is completed in the last month of the residency year.

**General PGY-2 ASHP Residency Standards (see Accreditation Standards: PGY2 Residency)**

**ASHP Accreditation Standards for Specialized PGY2 Residency in an Advanced Area of Practice**

**Residency Learning System**
http://www.ashp.org/menu/Accreditation/ResidencyAccreditation.aspx

**Resident’s Guide to the RLS**
Presentations and Activities

In order for the resident to attain competency in the levels of practice as required by the pharmacy practice standards, residents will complete the following:

**Assigned Projects/Presentations**
A schedule of assigned presentations will be provided during the orientation month of July. Any deviations from this schedule must be approved by the Residency Program Director. The resident will also be expected to present various projects, proposals, etc. as they come up throughout the year.

For examples of assigned projects and presentations, please e-mail v21pbmstaff@va.gov

**Optional Presentations**
If the schedule allows and there is sufficient resident interest, the PGY-2 residents may opt into participating in a Journal Club experience. PGY2 Residents participate in the monthly VA National Journal Clubs, may be invited to participate in presentation of a journal club nationally or may optionally present at the VASNHCS weekly meetings. Appendix VI has guidance for completing a journal club that may be useful.

For examples of assigned projects and presentations, please e-mail v21pbmstaff@va.gov

**Required Meetings and Activities**
A list of required meetings will be provided during the orientation month of July. Any absences from those meetings will need to be pre-arranged by the Residency Program Director. In addition, any Learning Experience specific required meetings/activities will be outlined in the Learning Experience Descriptor. Any absences will need to be pre-arranged by the assigned preceptor.

*Example List of Required Meetings and Assignments:*:
- VISN 21 PBM Meetings (*4th Friday/month*)
  - Residents assist in taking minutes for these meetings and contribute to agenda items
- VISN 21 MUM Team Meetings (*2nd Wednesday/month*)
  - Residents assist in taking minutes for these meetings and contribute to agenda items
- Assigned VISN Taskforce Meetings
  - Residents assist in taking minutes for these meetings
  - Assist in the agenda creation and in running the meetings
- Current Taskforces:
  - Academic Detailers
  - Adverse Drug Event Reporting (ADERs)
  - Anticoagulation
  - Antimicrobial Stewardship
  - Hepatitis C
  - Endocrine
  - Mental Health
  - Nutrition
- Oncology
- Pain
- Telephone Care
- Wound Care

- Weekly PBM Staff Meetings (*Fridays at 9:00am*)
- One local or state meeting and one national professional meeting (pharmacy-related)
- Longitudinal VASNHCS experience (*4 hours weekly*)
- Local VASNHCS P&T Meetings (*4th Wednesday/month*)
- Assist with Pharmacy Week (*Usually 3rd week in October*)
- Resident Leadership Conference (*Every 2nd Wed and 4th Friday at 3:30pm*)
- Assigned PharmAcademic evaluations as well as initial and quarterly self-evaluations
- Western States Practice Presentations as assigned
- Understanding Designs for Clinical Research Course

**Example List of Optional Meetings and Assignments:**

**At VASNHCS Medical Center:**

- PharmD student presentations
- BCPS Lecture Topics
- Local Journal Clubs
- Local Pharmacy Staff Meetings (Thursday AM)
- PGY1 Snapshot and Case presentations
- Monthly Anticoagulation Round Table
- Miscellaneous meetings/lectures
- IRB/Research Meetings with Research Pharmacist

**Via Conference Call/Live Meeting**

- Unassigned Task Forces (see above list)
- Weekly PBM Pharmacy Education Programs
- Monthly Pharmacoeconomic National Conferences (HERC etc.)
- Region 1 BISL Team Call (*Every Wednesday*)
- Pharmacoeconomic Modeling Workgroup
- Executive Leadership Forum (*Every Thursday*)
- Workload Capture Workgroup (*2nd Monday/month*)
- National Clinical Pharmacy Advisory Group Call (*Biweekly, Thursday*)
- VISN 21 Clinical Pharmacy Practice Council (*3rd Friday/Month*)
- National Clinical Pharmacy Call – Forecasting (*3rd Wednesday/Month*)
- VISN 21 Residency Program Directors Committee (*4th Thursday/Month*)
- VPE VACO Monthly Call (*4th Monday/Month*)
- Health Care Delivery Board (*2nd Tuesday/3 Months*)
Scheduled Events
Each Resident should start an Individual Calendar of Scheduled Events (Usually kept on Outlook). Below are some of the events that should be considered for addition to the calendar:

<table>
<thead>
<tr>
<th>Orientation</th>
<th>1st Quarter (July-Sept)</th>
<th>2nd Quarter (Oct-Dec)</th>
<th>3rd Quarter (Jan-Mar)</th>
<th>4th Quarter (Apr-June)</th>
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<tr>
<td>Orientation</td>
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<td>• Formulary</td>
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<td>• Facility</td>
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<td>• Computer System</td>
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<td>Weekly Formulary Coverage/Conversions</td>
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<tr>
<th>Residency Professional Meetings</th>
<th>1st Quarter (July-Sept)</th>
<th>2nd Quarter (Oct-Dec)</th>
<th>3rd Quarter (Jan-Mar)</th>
<th>4th Quarter (Apr-June)</th>
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<td>VISN 21 PBM Workgroup Meeting (4th Friday)</td>
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<td>Clinical Practice Council (Odd month 4th Wednesday)</td>
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<td>VASNHCS P&amp;T Meetings (4th Wednesday)</td>
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<td>VISN Formulary Leader National Conference Call (2nd Monday)</td>
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<td>VISN 21 Clinical Pharmacy Specialist Group (3rd Friday)</td>
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<td>Population Management</td>
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<tr>
<td>Research Project</td>
<td>Select Research Project</td>
<td>Develop and Conduct Research</td>
<td>Report Research</td>
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<td>Health Economics Weekly Didactic Course</td>
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<td>Website Maintenance</td>
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<td>Task Force(s)</td>
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Residency Structure and Rotations

Orientation
Orientation will occur throughout the month of July and will include orientation to the VASNHC medical center, an introduction to the residency/RLS/PharmAcademic system, clinical practice orientation, computer training, and other miscellaneous mandatory training (organization, etc.). Residents will be oriented to the program including the purpose, applicable accreditation regulations and standards, designated learning experiences, and the evaluation strategy and policy. The RPD will perform this orientation according to a schedule provided to the residents in advance. The staff will also be oriented to the residency program as necessary. Additionally, preceptors will be responsible for orienting their residents to their assigned learning experiences including reviewing and providing written copies of the learning experience educational goals and objectives, associated learning activities, and evaluation strategies.

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. Any changes to this schedule need to be in agreement with all preceptors involved, the Residency Board, and/or the Residency Program Director. The resident will be expected to achieve 90% of the program objectives in order to graduate from the residency.

The core rotations will be in the areas of:
- Data Management
- Formulary Management
- Pharmacoconomics and Health Outcomes
- Pharmacy Practice Foundation
- Population Management
- Clinical Research Project
- Service and Policy Development

Elective Experiences
Each resident will have opportunities for one or two experiences that are considered electives. Elective experiences are specifically intended to tailor the residency experience to the resident’s needs, goals, and interests. It is possible to elect to work in one area for additional time to gain more confidence and skills. Due to the limited patient population we serve, electives may be completed at another hospital or health care facility as long as there is agreement with each facility involved. The experience at another facility must be one that has a commitment to education and the preceptor will evaluate assigned goals and objectives. Despite the nature of this program, if a resident is interested in an alternative are (ex. direct patient care), this can be reasonably arranged. **The resident is responsible for arranging all electives with the preceptor and the RPD.** It is recommended that this be accomplished as early as possible in the residency year to facilitate planning of all involved.
Electives may be selected from well-established pharmaceutical care areas or developed for unconventional areas. Any of the core areas may be selected as an advanced elective rotation. Other opportunities include, but are not limited to:

- Academics
- Advanced Critical Care
- Advanced Cube Building
- Advanced Infectious Disease
- Advanced Pharmacoeconomics
- Cardiology
- Community Based Outpatient
- Database Management
- Diabetes/Endo
- Emergency Department
- Family Practice
- Home Based Primary Care
- Home Infusion
- Medication Safety
- Neurology
- Nuclear Medicine
- Nutrition (Renown)
- Oncology (Renown)
- Pediatrics
- Psych/Mental Health
- Specialty Clinic
- Surgery/Anesthesiology (Renown)
- Trauma
- Women’s Health
## Program Structure Overview

<table>
<thead>
<tr>
<th>July Orientation</th>
<th>August to December Requirements</th>
<th>December Transitional</th>
<th>January to June Requirements/Electives</th>
</tr>
</thead>
</table>
| • Hospital Orientation  
  • Residency/ Intro to RLS  
  • Clinical Practice Orientation  
  • Computer Training  
  • Mandatory Training | **Extended Learning Experiences**  
  • Data Management 1  
  • Population Management and other clinic experiences as determined by interests  
  • Pharmacy Practice Foundation  
  • P’Econ and Health Outcomes (VASNHCS Component)  
  • Clinical Research Project | Projects  
  ASHP Midyear | **Extended Learning Experience**  
  • Data Management 2  
  • Population Management and other clinic experiences as determined by interests  
  • Pharmacy Practice Foundation  
  • P’Econ and Health Outcomes (VASNHCS Component)  
  • Clinical Research Project  
  Elective  
  Other as determined by evaluation |

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<thead>
<tr>
<th>Orientation</th>
<th>Longitudinal Experiences</th>
<th>Longitudinal Experiences</th>
<th>Longitudinal Experiences</th>
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</thead>
</table>
| • Formulary Management  
  • Pharmacoeconomics and Health Outcomes  
  • Service & Policy Development | • Formulary Management  
  • Pharmacoeconomics and Health Outcomes  
  • Service & Policy Development | • Formulary Management  
  • Pharmacoeconomics and Health Outcomes  
  • Service & Policy Development |

## Example Rotation Schedule

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<tr>
<th>July</th>
<th>August</th>
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<td>Clinical Research Project</td>
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<td>Pharmacy Practice Foundation</td>
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<tr>
<td>Orientation</td>
<td>Data Management 1</td>
<td>Pharmacy Practice Foundation</td>
<td>ASHP Midyear &amp; Projects</td>
<td>P Econ/Outcomes (VASNHCS Component)</td>
<td>Formulary Management</td>
<td>Service and Policy Development</td>
<td>Population Management (VASNHCS)</td>
<td>P Econ/Outcomes (VASNHCS Component)</td>
<td>Pharmacoeconomics and Health Outcomes (Longitudinal Component)</td>
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<table>
<thead>
<tr>
<th>Learning Experience</th>
<th>Preceptor(s)</th>
<th>Contact Information</th>
</tr>
</thead>
</table>
| Data Management 1                | Joy Meier, Pharm.D., BCACP, PA  
Amy Robinson, Pharm.D.             | 925-372-2381  
650-336-4619               |
| Data Management 2                | Amy Robinson, Pharm.D.  
Janice Taylor, Pharm.D. BCPS  
Jennifer Marin, Pharm.D., BCPS | 650-336-4619  
775-326-5727  
562-340-1863                |
| Formulary Management             | Scott Mambourg, PharmD, BCPS, AAHIVP  
Janice Taylor, PharmD, BCPS     | 775 326-5724  
775-326-5727                |
| Pharmacoeconomics and Health Outcomes | Scott Mambourg, Pharm.D., BCPS, AAHIVP  
Amneet Rai, Pharm.D. (Local Experience)  
Jennifer Marin, Pharm.D., BCPS | 775-326-5724  
775-786-7200 ext. 5866  
562-340-1863                |
| Pharmacy Practice Foundation     | Scott Mambourg, Pharm.D., BCPS, AAHIVP  
(preceptor on record for PharmAcademic)  
Beth Foster, RPh.           | 775-326-5724  
775-326-2712                |
| Population Management            | Scott Mambourg, PharmD, BCPS, AAHIVP  
Janice Taylor, PharmD., BCPS     | 775-326-5724  
775-326-5727                |
| Research Projects                | Scott Mambourg, PharmD, BCPS, AAHIVP  
Mostaql Huq, Pharm.D., Ph.D.    | 775-326-5724  
775-326-2720                |
| Service and Policy Development   | Scott Mambourg, PharmD, BCPS, AAHIVP  
Diana Higgins, Pharm.D. (preceptor on record for PharmAcademic) | 775-326-5724  
916-923-4532                |
Outcomes/Goals for PGY-2 Pharmacy Residency

**Outcome R1:** Demonstrate effective leadership and practice management skills in the areas of administration, analytics, informatics, and outcomes.

**Goal R1.1:** Exhibit ongoing development of the essential personal skills of a practice leader.

**Goal R1.2:** Contribute to the leadership and management activities within the pharmacy outcomes and healthcare analytics field by exercising superior communication and political skills.

**Goal R1.3:** Exercise practice leadership.

**Outcome R2:** Optimize patient outcomes through the provision of evidence-based1, patient-centered therapy and fostering effective decision support as an integral part of interdisciplinary healthcare teams.

**Goal R2.1:** Develop collaborative professional relationships with members of the PBM staff, various health care teams, taskforces, and workgroups.

**Goal R2.2:** Lead departmental and/or interdisciplinary teams in the design, implementation, and/or enhancement of the organization’s criteria for medication use, monitoring, and outcomes measurement.

**Goal R2.3:** Prioritize development of analytic tools that improve and assist clinicians in patient care.

**Goal R2.4:** Assure that all patient-specific, medication-specific, and evidence-based pharmacotherapy information required to support effective medication-related decisions is readily available in a useful format to members of interdisciplinary, patient-centered teams.

**Goal R2.5:** Guard the confidentiality and security of health data stored in the health care organization’s database.

**Outcome R3:** Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.

**Goal R3.1:** Establish oneself as an expert for data retrieval, medication information, and outcomes-related resources within the organization.

**Goal R3.2:** Contribute pharmacist perspective and expertise regarding the development, implementation, utilization, and revision of outcomes measures and metrics, and analysis tools in interactions with information technology staff, PBM staff, clinicians and end users.

**Goal R3.3:** Critically evaluate and employ advanced analysis skills to relevant biomedical literature in preparing analysis tools, drug information responses, pharmacoeconomic proposals, and drug use criteria.

**Goal R3.4:** Identify opportunities for improving the safety of aspects of the organization’s medication-use system through analysis tools, measures, metrics, guidelines and policies.

**Goal R3.5:** Assist the organization in achieving compliance with accreditation, legal, regulatory, and safety requirements related to the use of medications (e.g., Joint Commission requirements; ASHP standards, statements, and guidelines; state and federal laws regulating pharmacy practice; OSHA regulations).

**Outcome R4:** Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.

**Goal R4.1:** Provide effective education and training on pharmacoeconomic proposals, analysis tools/software utilization, academic detailing goals, or general drug therapy topics to health care professionals and health care professionals in training.

---

1 Evidence-based medicine -- the integration of best research evidence, clinical expertise, and patient values in making decisions about the care of individual patients (Institute of medicine, 2001; Straus and Sackett, 1998). Best research evidence includes evidence that can be quantified, such as that from randomized controlled trials, laboratory experiments, clinical trials, epidemiological research, and outcomes research and evidence derived from the practice knowledge of experts, including inductive reasoning (Guyatt et al., Higgs et al., 2001). Clinical expertise is derived from the knowledge and experience developed over time from practice, including inductive reasoning. Patient values and circumstances are the unique preferences, concerns, expectations, financial resources, and social supports that are brought by each patient to a clinical encounter. (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academies Press; 2001.)
Goal R4.2:  Design and deliver education programs to the public that center on health improvement, wellness, and disease prevention.

Goal R4.3:  Design and present Academic Detailing education programs to healthcare providers and patients in order to improve patient outcomes.

Outcome R5:  Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.

Goal R5.1:  Demonstrate and apply understanding of basic analytics principles, standards, best practices.
Goal R5.2:  Execute a project life cycle for a significant analysis tool.
Goal R5.3:  Execute an original project through the analysis tool life cycle.

Outcome 6:  Understand a pharmacy benefits management structure and contribute to the organization’s formulary management.

Goal R6.1:  Understand the interrelationship of the pharmacy benefit management function, and the network health care systems.
Goal R6.2:  Provide pharmacy expertise to the organization in the area of managed care by contributing to the ongoing development of the organization’s formulary through review of existing, development of new, and implementation of pharmacoeconomic proposals, drug use criteria, and organizational policies and procedures affecting the care of patients.
Goal R6.3:  Understand the organization’s process for contracting with pharmaceutical manufacturers.

Outcome 7:  Perform effective direct patient care on high-risk or other target patients using developed analysis tools as part of a population management strategy.

Goal R7.1:  Collect and analyze patient information.
Goal R7.2:  Establish collaborative pharmacist-patient and pharmacist-caregiver relationships.
Goal R7.3:  Appropriately triage patients if necessary.
Goal R7.4:  Design evidence-based therapeutic regimens.
Goal R7.5:  Design evidence-based monitoring plans.
Goal R7.6:  Recommend regimens and monitoring plans.
Goal R7.7:  Design education for a patient’s regimen and monitoring plan.
Goal R7.8:  Implement regimens and monitoring plans.
Goal R7.9:  Evaluate patient progress and redesign regimens and monitoring plans.
Goal R7.10:  Communicate pertinent patient information to facilitate continuity of care.
Goal R7.11:  Document direct patient-care activities appropriately.

Outcome R8:  Contribute to the body of pharmacotherapy knowledge by conducting outcomes-based research or quality improvement projects with the assistance of analysis tools.

Goal R8.1:  Conduct a pharmacy outcomes and/or health analytics-related research or QI project using effective research and project management skills.
Goal R8.2:  Engage in the publication process.
Goal R8.3:  Prepare and deliver an effective poster presentation.

Outcome E1:  Demonstrate advanced skills in working with a specific technology or automation product (such as Cube Building, Clinical Reminders, etc.).

Goal E1.1:  Serve as an expert resource for the management of a specific technology or system.

Outcome E2:  Utilize added knowledge and skills to enable the application of contemporary quality methodology to the management of pharmacy services.

Goal E2.1:  Participate in clinical and economic outcomes analyses.

Outcome E3:  Demonstrate skills required to function in an academic setting.

Goal E3.1:  Understand faculty roles and responsibilities.
Goal E3.2:  Exercise teaching skills essential to pharmacy faculty.
Educational Goals Linked to Learning Experiences

ASHP has assisted PGY-2 Advanced Pharmacy Practice Residency programs by developing a generic set of goals and objectives. The goals and objectives are separated into required and elective. All required goals and objectives must be taught and formally evaluated at least once in the residency. The program will identify if any additional elective goals and objectives will be evaluated. These outcomes/goals are listed earlier in the Residency Manual, and the full Outcomes, Goals, and Objectives document can be found in Appendix V. The Goals and Objectives form the basis for feedback and evaluation.

A table of which Learning Experience(s) each of the goals and objectives are taught and evaluated in is below. The table is based on the ASHP RLS form for Recording Step 3 Goal and Assessment Assignment Decisions. This tool is used by residency teams to assign their choice of educational goals and objectives to the learning experiences in which they will be taught and decides in which of these learning experiences each goal will be evaluated. The goals can be taught and evaluated once or multiple times. TE stands for taught and evaluated, whereas TE+ stands for taught and evaluated over multiple experiences. Appendix XVII provides the same table with the preceptor evaluating the experience included as well as a basic evaluation schedule.

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<thead>
<tr>
<th>Outcome/Goal</th>
<th>Emphasis</th>
<th>Learning Experiences</th>
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<tbody>
<tr>
<td>Required outcomes and educational goals</td>
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<tr>
<td><strong>Outcome R1: Demonstrate effective leadership and practice management skills in the areas of administration, analytics, informatics, and outcomes.</strong></td>
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<tr>
<td>Goal R1.1 Exhibit ongoing development of the essential personal skills of a practice leader.</td>
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<tr>
<td>Goal R1.2 Contribute to the leadership and management activities within the pharmacy outcomes and healthcare analytics field by exercising superior communication and political skills.</td>
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<tr>
<td>Goal R1.3 Exercise practice leadership.</td>
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<td>DATA MANAGEMENT</td>
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**Outcome R2: 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.**
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<tr>
<td>Required outcomes and educational goals</td>
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<tr>
<td>Goal R2.1</td>
<td>Develop collaborative professional relationships with members of the PBM staff, various health care teams, taskforces, and workgroups.</td>
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<tr>
<td>Goal R2.2</td>
<td>Lead departmental and/or interdisciplinary teams in the design, implementation, and/or enhancement of the organization’s criteria for medication use, monitoring, and outcomes measurement.</td>
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<td>Goal R2.3</td>
<td>Prioritize development of analytic tools that improve and assist clinicians in patient care.</td>
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<td>Goal R2.4</td>
<td>Assure that all patient-specific, medication-specific, and evidence-based pharmacotherapy information required to support effective medication-related decisions is readily available in a useful format to members of interdisciplinary, patient-centered teams.</td>
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<tr>
<td>Goal R2.5</td>
<td>Guard the confidentiality and security of health data stored in the health care organization’s database.</td>
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</table>

**Outcome R3: Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.**

| Goal R3.1 | Establish oneself as an expert for data retrieval, medication information, and outcomes-related resources within the organization. | TE+ TE TE TE |
| Goal R3.2 | Contribute pharmacist perspective and expertise regarding the development, implementation, utilization, and revision of outcomes measures and metrics, and analysis tools in interactions with information technology staff, PBM staff, clinicians and end users. | TE+ TE TE TE |
| Goal R3.3 | Critically evaluate and employ advanced analysis skills to relevant biomedical literature in preparing analysis tools, drug information responses, pharmacoeconomic proposals, and drug use criteria. | TE+ T TE TE |

**Learning Experiences**

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<th>FORMULARY MANAGEMENT</th>
<th>PHARMACY PRACTICE FOUNDATION</th>
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<tr>
<td>Goal R3.4</td>
<td>Identify opportunities for improving the safety of aspects of the organization’s medication-use system through analysis tools, measures, metrics, guidelines and policies.</td>
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<tr>
<td>Goal R3.5</td>
<td>Assist the organization in achieving compliance with accreditation, legal, regulatory, and safety requirements related to the use of medications (e.g., Joint Commission requirements; ASHP standards, statements, and guidelines; state and federal laws regulating pharmacy practice; OSHA regulations).</td>
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Outcome R4: Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.

| Goal R4.1 | Provide effective education and training on pharmacoeconomic proposals, analysis tools/software utilization, academic detailing goals, or general drug therapy topics to health care professionals and health care professionals in training. | TE+ TE T TE |
| Goal R4.2 | Design and deliver education programs to the public that center on health improvement, wellness, and disease prevention. | TE TE T T |
| Goal R4.3 | Design and present Academic Detailing education programs to healthcare providers and patients in order to improve patient outcomes. | TE+ T TE TE |

Outcome R5: Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.

<p>| Goal R5.1 | Demonstrate a working knowledge of available technology for prescribing, order processing, distribution/dispensing, monitoring, safe and efficient administration, administration documentation. | TE+ TE TE |</p>
<table>
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<tr>
<th>Required outcomes and educational goals</th>
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<tbody>
<tr>
<td><strong>Goal R5.2</strong> Demonstrate and apply understanding of basic analytics principles, standards, and best practices.</td>
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<tr>
<td><strong>Goal R5.3</strong> Execute an original project through the analysis tool life cycle.</td>
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### Outcome 6: Understand a pharmacy benefits management structure and contribute to the organization’s formulary management.

| Goal R6.1 Understand the interrelationship of the pharmacy benefit management function, and the network health care systems. | TE | TE | T |
| Goal R6.2 Provide pharmacy expertise to the organization in the area of managed care by contributing to the ongoing development of the organization’s formulary through review of existing, development of new, and implementation of pharmacoeconomic proposals, drug use criteria, and organizational policies and procedures affecting the care of patients. | TE | TE | T |
| Goal R6.3 Understand the organization’s process for contracting with pharmaceutical manufacturers. | TE | TE | T |

### Outcome 7: Perform effective direct patient care on high-risk or other target patients using developed analysis tools as part of a population management strategy.

<p>| Goal R7.1 Collect and analyze patient information. | TE+ | TE | T | TE |
| Goal R7.2 Establish collaborative pharmacist-patient and pharmacist-caregiver relationships. | TE | TE |
| Goal R7.3 Appropriately triage patients if necessary. | TE | TE |
| Goal R7.4 Design evidence-based therapeutic regimens. | TE | TE |
| Goal R7.5 Design evidence-based monitoring plans. | TE+ | TE | TE |</p>
<table>
<thead>
<tr>
<th>Outcome/Goal</th>
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<td><strong>Required outcomes and educational goals</strong></td>
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<tr>
<td>Goal R7.6 Recommend regimens and monitoring plans.</td>
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<td>Goal R7.7 Design education for a patient’s regimen and monitoring plan.</td>
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<td>Goal R7.8 Implement regimens and monitoring plans.</td>
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<td>Goal R7.9 Evaluate patient progress and redesign regimens and monitoring plans.</td>
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<td>Goal R7.10 Communicate pertinent patient information to facilitate continuity of care.</td>
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<td>Goal R7.11 Document direct patient-care activities appropriately.</td>
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<td><strong>Outcome R8: Contribute to the body of pharmacotherapy knowledge by conducting outcomes-based research or quality improvement projects with the assistance of analysis tools.</strong></td>
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<td>Goal R8.1 Conduct a pharmacy outcomes and/or health analytics-related research or QI project using effective research and project management skills.</td>
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<td>Goal R8.2 Engage in the publication process.</td>
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<td>Goal R8.3 Prepare and deliver an effective poster presentation.</td>
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<td><strong>Elective outcomes and educational goals</strong></td>
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<tr>
<td><strong>Outcome E1: Demonstrate advanced skills in working with a specific technology or automation product (such as Cube Building, Clinical Reminders, etc.).</strong></td>
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<tr>
<td>Goal E1.1 Serve as an expert resource for the management of a specific technology or system.</td>
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<tr>
<td><strong>Outcome E2: Utilize added knowledge and skills to enable the application of contemporary quality methodology to the management of pharmacy services.</strong></td>
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<tr>
<td>Goal E2.1 Participate in clinical and economic outcomes analyses.</td>
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<tr>
<td><strong>Outcome E3: Demonstrate skills required to function in an academic setting.</strong></td>
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<tr>
<td>Goal E3.1 Understand faculty roles and responsibilities.</td>
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<td>Goal E3.2 Exercise teaching skills essential to pharmacy faculty.</td>
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### Learning Experiences

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<tr>
<th></th>
<th>DATA MANAGEMENT</th>
<th>FORMULARY MANAGEMENT</th>
<th>PHARMACY PRACTICE</th>
<th>PHARMACY PRACTICE FOUNDATION</th>
<th>POPULATION MANAGEMENT</th>
<th>RESEARCH PROJECTS</th>
<th>SERVICE DEVELOPMENT AND POLICY</th>
<th>ELECTIVE</th>
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<tbody>
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<td>Elective</td>
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<td>Outcome E1</td>
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<tr>
<td>Goal E1.1</td>
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<td>Outcome E3</td>
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Learning Experience Descriptors

1. **Data Management**

2. **Formulary Management**

3. **Pharmacoconomics and Health Outcomes**

4. **Pharmacy Practice Foundation**

5. **Population Management**

6. **Clinical Research Project**

7. **Service and Policy Development**

8. **Elective (Example)**

**Data Management 1 & 2**

*Updated 9/26/2018*

**Brief Learning Experience Descriptor:**
Overall the resident will learn and apply a variety of data skills from database creation/extraction to 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 upon graduation from the program will have an overall understanding of the VA health data repository enterprise architecture data warehouse structure applied to VISN 21. This will include specialized knowledge of cube design and development, database management, use of collaborative development environments, digital dashboard development and maintenance, and formulating, executing, and revising plans and coding procedures for database searches using SQL.

**Preceptors:**
### Goals and Associated Objectives formally taught and evaluated during this experience:

#### Outcome R2: Manage and improve the medication-use process

**Goal R2.3:**
Prioritize development of analytic tools that improve and assist clinicians in patient care.

<table>
<thead>
<tr>
<th>Objective</th>
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</tr>
</thead>
<tbody>
<tr>
<td>OBJ R2.3.1</td>
<td>(Evaluation) Appropriately prioritize development of analytic tools based on potential for improvement of patient care if given limited time and multiple responsibilities. Explain factors to consider when determining priority for patient-care improvement projects. IO Explain how the complexity or severity of patient problems may mandate urgency of tool development and reordering of current priorities.</td>
</tr>
</tbody>
</table>

**Goal R2.4:**
Assure that all patient-specific, medication-specific, and evidence-based pharmacotherapy information required to support effective medication-related decisions is readily available in a useful format to members of interdisciplinary, patient-centered teams.

<table>
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<tbody>
<tr>
<td>OBJ 2.4.1</td>
<td>(Synthesis) Effectively present the benefits of functionally integrated evidence-based and other knowledge resources, analysis tools, and medication information systems. Demonstrate utilization of analysis tools to members of interdisciplinary teams who will be using them in their daily practice.</td>
</tr>
</tbody>
</table>

**Goal R2.5:**
Guard the confidentiality and security of health data stored in the health care organization’s database.

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<tr>
<td>OBJ R2.5.1</td>
<td>(Comprehension) Explain the organization’s regulatory policies for maintaining security of patient information. HIPAA, Privacy, and Security Training Demonstrate knowledge of protections used to protect information within the data warehouse and within dashboards and reports from those not authorized to access them.</td>
</tr>
<tr>
<td>OBJ R2.5.2</td>
<td>(Synthesis) Collaborate with information technology and other professionals to assess analysis tool security and patient protections for conformance with accepted standards including access control, data security, data encryption, HIPAA privacy regulations, and ethical and legal issues. Explain accepted criteria for system security. Explain current HIPAA regulations and the application of those regulations to pharmacy technology and automation systems.</td>
</tr>
</tbody>
</table>

#### Outcome R3: Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.

**Goal R3.1:**
Establish oneself as an expert for data retrieval, medication information, and outcomes-related resources within the organization.
<table>
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<th>Objective</th>
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<tbody>
<tr>
<td>OBJ R3.1.1 (Synthesis) Implement a successful strategy for earning credibility within the organization to be an authoritative expert on the creation of analytic tools, measurement of outcomes, and overall evidence-based medication-related care of patients.</td>
<td>Identify opportunities for the pharmacy outcomes and healthcare analytic specialist to earn credibility with members of the various interdisciplinary taskforces. Identify opportunities for the specialist to earn credibility within the PBM and various providers within the organization.</td>
</tr>
<tr>
<td>OBJ R3.1.2 (Synthesis) Fulfill requests for provider-requested data, reports, usage/cost information, or outcomes in an accurate and efficient manner.</td>
<td>Fulfill data requests for individuals and taskforces as appropriate, considering existing resources and priorities.</td>
</tr>
<tr>
<td>OBJ R3.1.3 (Comprehension) Answer questions and troubleshoot issues from users of the organization’s analysis tools, criteria, cost, or policies and procedures.</td>
<td>Support dashboard and report inquiries to support the data managers when identified by the users.</td>
</tr>
<tr>
<td><strong>Goal R3.2:</strong> Contribute pharmacist perspective and expertise regarding the development, implementation, utilization, and revision of outcomes measures and metrics, and analysis tools in interactions with information technology staff, PBM staff, clinicians and end users.</td>
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</tr>
<tr>
<td>OBJ R3.2.2 (Synthesis) When presented with a non-standard problem, apply lateral (out-of-box) thinking to its solution.</td>
<td>Troubleshoot dashboards/reports with error in the code. Research and apply solutions for modifying SQL, SSRS, or Pyramid when changes require non-standard approaches.</td>
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<tr>
<td><strong>Outcome R4: Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.</strong></td>
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<tr>
<td><strong>Goal R4.1:</strong> Provide effective education and training on pharmacoeconomic proposals, analysis tools/software utilization, academic detailing goals, or general drug therapy topics to health care professionals and health care professionals in training.</td>
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<tr>
<td>OBJ R4.1.1 (Application) Use effective educational techniques in the design of all educational activities.</td>
<td>Identify emerging issues in securing and integrating evidence-based information suitable for educational sessions. Identify changes in medication-use or newly developed analysis tools that require training of staff within the organization. Explain the differences in effective educational strategies when teaching colleagues versus residents versus students versus health professionals in other disciplines.</td>
</tr>
</tbody>
</table>
Design instruction that meets the individual learner’s needs.  
Explain how different instructional delivery systems (e.g., demonstration, written materials, web-based) foster different types of learning.  
Design instruction that employs strategies, methods, and techniques congruent with the objectives for an education or training program.

**OBJ R4.1.2**  
(Application) Use advanced public speaking skills to communicate effectively in large and small group situations.

- Explain techniques that can be used to enhance audience interest.  
- Explain techniques that can be used to enhance audience understanding.  
- Explain speaker habits that distract the audience.  
- Explain the importance of developing excellence in public speaking for fulfillment of the role as a pharmacoeconomic pharmacist or data manager/analyst.  
- Explain a systematic method for ongoing improvement in one’s own public speaking skills.

**Outcome R5: Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.**

**Goal R5.1:**  
Demonstrate a working knowledge of available technology for prescribing, order processing, distribution/dispensing, monitoring, safe and efficient administration, administration documentation

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<tbody>
<tr>
<td>OBJ R5.1.1</td>
<td>Understand the process of the CPRS &amp; VistA ordering and processing system to comprehend how data comes across into the database.</td>
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**Goal R5.2:**  
Demonstrate and apply understanding of basic analytics principles, standards, and best practices.

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<th>Objective</th>
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</table>
| OBJ R5.2.1 | Explain the need for efficient programming.  
Apply techniques to analyze query performance and the impact of changes on performance.  
Explain the function of indexes in SQL programming and the proper utilization of clustered indexes.  
Demonstrate the ability to reorganizing queries to improve performance. |

| OBJ R5.2.2 | Explain the advantages of dashboards and reports.  
Describe best practices to effectively design dashboards and report tools.  
Identify the best tool for a given task (e.g. SQL coding versus Pyramid Analytics). |

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</table>
| OBJ R5.2.2 | Explain the advantages of dashboards and reports.  
Describe best practices to effectively design dashboards and report tools.  
Identify the best tool for a given task (e.g. SQL coding versus Pyramid Analytics). |
### OBJ R5.2.3
(Evaluation) Exercise proficiency in the use of databases and data analysis software to successfully construct reports and dashboards

- Explain the concept of dimensional modeling.
- Explain how the design of the data warehouse facilitates decision making.
- Explain the difference between transactional and analytic database design.
- Explain how to develop analysis tools that are sufficiently detailed to support desired user goals.
- Evaluate the effectiveness, utilization, and quality of the tools requested by providers within the organization.
- Explain the principles and uses of databases in the management of large volumes of data.
- Draw upon appropriate databases to answer posed questions.
- Perform statistical analyses for the purpose of evaluating the data.
- Draw accurate conclusions regarding significance of information.

### OBJ R5.2.4
(Comprehension) Explain the concept of data warehousing and its uses in clinical and operational decision-making.

- Understand the difference between live VistA & CRPS and the Corporate Data Warehouse (CDW).

### OBJ R5.2.5
(Synthesis) Apply an understanding of evidence-based medication therapy management to contribute to the establishment of process and outcomes measurements that would be used to manage and evaluate the implementation and success of a disease management and/or medication therapy management program.

- Explain the concept of process measurements.
- Explain the concept of outcomes measurements.
- Explain commonly used process measurements.
- Explain commonly used outcomes measurements.

### Goal R5.3:
Execute an original project through the analysis tool life cycle.

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<tbody>
<tr>
<td>OBJ R5.3.1  (Synthesis) Contribute to the creation and development of a new analysis tool.</td>
<td>Explain how to develop metrics for evaluation of outcomes using analysis tools.</td>
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<tr>
<td>OBJ R5.3.2  (Synthesis) Contribute to the development of a plan for testing of an analysis tool and evaluate validity of the information</td>
<td>Explain the concept of interface testing. Explain the concept of testing for the validity of data. Explain the concept of functional testing. Explain the concept of testing for clinical validity. Explain the concept of regression testing. Explain the concept of usability testing. Explain the value of release notes for technology or automation upgrades.</td>
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Explain the necessity of balancing decisions for what to include in the analysis tool relative to available resources.

OBJ R5.3.3
(Synthesis) Contribute to the implementation and training for the new analysis tool.

OBJ R5.3.4
(Synthesis) Contribute to the maintenance of analysis tools.

Update code when changes to the underlying data are made.

Troubleshoot issues as they arise.

Understand the importance of documenting changes and developing code/tools that can be easily understood and maintained by another data manager.

Outcome R7: Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.

Goal R7.1:
Collect and analyze patient information.

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| OBJ R7.1.1
(Application) Effectively identify high risk or targeted patients using analysis tools such as dashboards or reports and prioritize the delivery of pharmaceutical care. | Generate a strategy for integrating the use of clinical criteria into patient care. Implement a strategy for integrating the use of clinical criteria into patient care for a particular project/tool. |

Schedule:
Extended Learning Experience divided into two sections

- Assignments made on a daily/weekly basis by preceptor

Designated Meetings/Responsibilities:
VISN 21 PBM Staff Meeting (Fridays at 9:00am)
Region 1 Weekly Meeting (Wednesdays at 11am), please attend at least one meeting a month
SQL Training (Dates TBD)
Taskforce Meetings (As assigned)

Checklist of assignments/projects/requirements that must be complete to successfully pass the learning experience (please list deadlines if there are any):

- SQL Training Exercises
- Queries involving basic SQL coding
- Conduct data queries using Pyramid Analytics
- Use and interpret analysis tools effectively
- Perform validation of data using SQL, Pyramid, CPRS and Dashboard tools
- Prepare data for presentation using Microsoft Excel, PowerPoint, or similar program
- Create and/or modify VISN21 SharePoint sites
- Create ETL packages using SSIS
- Development of data elements in dashboard tool or other end-user products
- Perform maintenance and troubleshooting on analysis tools
- Actively participate in new product development and design

Assigned Readings/Discussion topics:
**Formulary Management**
*Updated: 9/26/2018*

**Brief Learning Experience Descriptor:**
This is a required longitudinal learning experience that begins after orientation and continues throughout the year. The VISN 21 Pharmacy Executive and the VISN 21 Pharmacy Program Manager will serve as the preceptors for this learning experience. The resident will develop the knowledge, skills, values and abilities necessary to assist in creating and maintaining Drug Use Criteria/Criteria for Use, improving procurement, contract compliance, and inventory control activities to achieve maximum savings and data accuracy. Several standing committees and many practitioners are involved with the work of developing, modifying, and maintaining the VA National Formulary. In addition, the VISNs are responsible for adherence to Drug Use Criteria and Criteria for Use developed nationally and locally. The VISN PBM supports many aspects of the programs designed to support this system. The resident will be exposed to the concepts of managed care systems through their involvement in all aspects of VISN formulary management. Overall, the resident will better understand the complete cycle of drug procurement from the formulary addition, to negotiating contracts with the manufacturer, to ordering, and to receiving the pharmaceuticals. In addition the resident will gain the necessary knowledge and experience in revenue generation to better understand the legislation, regulation and policies concerning the prescription benefit within the Veterans Health Care Administration. Projects will be developed and assigned by the preceptor at the direction of committees, task forces, informal groups and will be independent and group learning experiences. The resident will be assigned tasks and will work with a variety of VISN employees in diverse areas to accomplish PBM goals/business for this learning experience.

**Preceptors:**

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<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Mambourg, PharmD, BCPS, AAHIVP</td>
<td>VISN 21 Pharmacy Executive</td>
<td><a href="mailto:Scott.Mambourg@va.gov">Scott.Mambourg@va.gov</a></td>
<td>775-326-5724</td>
</tr>
<tr>
<td>Janice Taylor, PharmD, BCPS</td>
<td>VISN 21 PBM Data Manager</td>
<td><a href="mailto:Janice.Taylor5@va.gov">Janice.Taylor5@va.gov</a></td>
<td>775-326-5727</td>
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</table>

**Goals and Associated Objectives formally taught and evaluated during this experience:**

**Outcome R2: Manage and improve the medication-use process**

**Goal R2.1:**
Develop collaborative professional relationships with members of the PBM staff, various health care teams, taskforces, and workgroups.

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| OBJ R2.1.1 | Explain the value of good peer relationships in the achievement of projects.  
(Analysis) Determine the appropriate type of communication, and the medium and organization for it, using an understanding of the target audience, the characteristics of the information to be communicated, effectiveness, efficiency, customary practice and the recipient's preferences.  
Accurately identify the primary theme or purpose of one's written, oral, or virtual communication.  
Accurately determine what information will provide credible background to support or justify the primary theme of one's communication.  
Logically sequence ideas in written and oral communication.  
Accurately determine the depth of communication appropriate to one's audience.  
Accurately determine words and terms that are appropriate to one's audience.  
Accurately determine one's audience's needs.  
Accurately identify the length of communication that is appropriate to the situation.  
Explain the importance of assessing the receiver's understanding of the message conveyed.  
Explain techniques for persuasive communication.  
Explain the value of consulting with administrators and key decision-makers when choosing route(s) for communication of information.  
Explain issues, including confidentiality, surrounding the choice of media to communicate information.  
Explain the differences in language (e.g., jargon, acronyms) used to communicate among the various disciplines involved in pharmacy outcomes and healthcare analytics.  
Explain the importance of adjusting one's communications for the specific category of health professional (e.g., nurses, physicians, etc.). |
|---|---|
| OBJ R2.1.2 | (Synthesis) Use group participation skills when leading or working as a member of a formal or informal work group or taskforce to establish openly communicative and collaborative working relationships.  
Participate in VISN Formulary Leader calls and agenda  
Explain the roles and responsibilities of the facilitator of a meeting.  
Explain effective strategies for facilitating meetings.  
Explain methods for assuring participation by all members of a group.  
Explain methods for effective group leadership.  
Explain methods for achieving consensus.  
Explain how to create an agenda for a meeting.  
Explain methods for assuring participation by all members of a group.  
Explain methods for effective group leadership.  
Explain the roles and responsibilities of the facilitator of a meeting.  
Explain effective strategies for facilitating meetings.  
Participate in VISN Formulary Leader calls and agenda |
### Goal R2.2:
Lead departmental and/or interdisciplinary teams in the design, implementation, and/or enhancement of the organization’s criteria for medication use, monitoring, and outcomes measurement.

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<tbody>
<tr>
<td>OBJ R2.2.1 (Synthesis) Collaborate with an interdisciplinary team to write or revise an existing guideline, measure/metric, policy, or protocol.</td>
<td>Appraise current policies and procedures for congruence with the organization’s mission, goals, and needs. Minutes and agenda development for PBM Workgroup, MUM Team, Task Forces and CPPC</td>
</tr>
</tbody>
</table>

### Outcome R3: Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.

### Goal R3.1:
Establish oneself as an expert for data retrieval, medication information, and outcomes-related resources within the organization.

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<td>Identify opportunities for the pharmacy outcomes and healthcare analytic specialist to earn credibility with members of the various interdisciplinary taskforces. Identify opportunities for the specialist to earn credibility within the PBM and various providers within the organization.</td>
</tr>
<tr>
<td>OBJ R3.1.2 (Synthesis) Fulfill requests for provider-requested data, reports, criteria, usage/cost information, or outcomes in an accurate and efficient manner.</td>
<td>Develop and present Drug Use Criteria Develop and present pharmacoeconomic evaluations</td>
</tr>
<tr>
<td>OBJ R3.1.3 (Comprehension) Answer questions and troubleshoot issues from users of the organization’s analysis tools, criteria, use, cost, or policies and procedures.</td>
<td>Support and answer inquiries related to drug costs and usage.</td>
</tr>
</tbody>
</table>

### Goal R3.2:
Contribute pharmacist perspective and expertise regarding the development, implementation, utilization, and revision of outcomes measures and metrics, and analysis tools in interactions with information technology staff, PBM staff, clinicians and end users.

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<td>OBJ R3.2.2 (Synthesis) When presented with a non-standard problem, apply lateral (out-of-box) thinking to its solution</td>
<td>Gain an understanding of the VISN formulary process to be able to troubleshoot issues and questions related to formulary management as necessary.</td>
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</table>
**Goal R3.3:**
Critically evaluate and employ advanced analysis skills to relevant biomedical literature in preparing analysis tools, drug information responses, pharmacoeconomic proposals, and drug use criteria.

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<tbody>
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<td>OBJ R3.3.1</td>
<td>Understand and differentiate between research methodology to determine appropriateness for a given study.</td>
</tr>
<tr>
<td>OBJ R3.3.2</td>
<td>Explain the application and interpretation of advanced statistical methods. Determine instances in which a study conclusion is erroneously supported by data display.</td>
</tr>
<tr>
<td>OBJ R3.3.3</td>
<td>Critically evaluate medical literature.</td>
</tr>
<tr>
<td>OBJ R3.3.4</td>
<td>Evaluate the results and conclusions of medical literature to determine applicability to our VA population.</td>
</tr>
<tr>
<td>OBJ R3.3.5</td>
<td>Compare and contrast the reputations and peer-review procedures of biomedical journals.</td>
</tr>
<tr>
<td>OBJ R3.3.6</td>
<td>Perform a drug information inquiry as necessary to answer questions posed by a taskforce or workgroup.</td>
</tr>
<tr>
<td>OBJ R3.3.7</td>
<td>Critically evaluate information and debrief after a visit from a pharmaceutical manufacturer representative.</td>
</tr>
</tbody>
</table>

**Outcome 6: Understand a pharmacy benefits management structure and contribute to the organization’s formulary management.**

**Goal R6.1:**
Understand the interrelationship of the pharmacy benefit management function, and the network health care systems.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJ R6.1.1</td>
<td>Compare VA PBM function against private sector PBMs. Explain patient eligibility requirements. Describe the methods for pharmaceutical procurement.</td>
</tr>
<tr>
<td>OBJ R6.1.2</td>
<td>Describe elements of the organization’s financial plan Describe the data elements of productivity measures (e.g. operational activities, budgets, FTE, etc.)</td>
</tr>
</tbody>
</table>

**Goal R6.2:**
Provide pharmacy expertise to the organization in the area of managed care by contributing to the ongoing development of the organization’s formulary through review of existing, development of new, and implementation of pharmacoeconomic proposals, drug use criteria, and organizational policies and procedures affecting the care of patients.

**OBJ R6.2.1**  
(Analysis) Create a written DUC or pharmacoeconomic proposal for a medication, class, or disease state that is to be considered by the organization’s P&T committee for approval.

- Explain signs and symptoms, epidemiology, risk factors, pathogenesis, natural history of disease, pathophysiology, clinical course, etiology, of the disease(s) to be treated by the drug under consideration.
- Explain the mechanism of action, pharmacokinetics, pharmacodynamics, pharmacoeconomics, usual regimen (dose, schedule, form, route, and method of administration), indications, contraindications, interactions, adverse reactions, and therapeutics of the drug under consideration.
- Explain the structure and types of information supplied by pharmaceutical manufacturers using the organization’s template format.
- Explain likely sources of relevant information not contained in the materials supplied by the pharmaceutical manufacturer.
- Explain the characteristics of scientific writing.
- Explain factors to consider when judging the safety, the efficacy, or the pharmacoeconomics of a specific medication.

**OBJ R6.2.2**  
(Synthesis) When appropriate, present the recommendations contained in to members of the P&T Committee.

- Explain the composition and responsibilities of the organization’s P&T committee.
- Explain an appropriate style of presentation for P&T committee meetings.

**OBJ R6.2.3**  
(Synthesis) Participate in the communication of information regarding formulary design and/or changes.

- Explain the process of developing a formulary.
- Explain factors in the managed care environment, including cost and quality objectives that affect the development of the formulary.

**OBJ R6.2.4**  
(Application) Review authorization requests for non-formulary agents and render a decision based on DUC guidelines and information provided by the requester/provider.

- Develop and present Drug Use Criteria.
- Develop and present Pharmacoeconomic Evaluations.

**Goal R6.3:**  
Understand the organization’s process for contracting with pharmaceutical manufacturers.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJ R6.3.1</td>
<td>(Knowledge) State the types of contracts possible with pharmaceutical companies.</td>
</tr>
<tr>
<td></td>
<td>Describe the purchasing hierarchy.</td>
</tr>
<tr>
<td>OBJ R6.3.2</td>
<td>(Comprehension) Explain what affects drug pricing in the marketplace.</td>
</tr>
<tr>
<td></td>
<td>Understand how purchasing works within and outside of the VA.</td>
</tr>
<tr>
<td>OBJ R6.3.3</td>
<td>(Comprehension) Explain the organization’s process for negotiating the price of medications with a manufacturer.</td>
</tr>
<tr>
<td></td>
<td>Explain the process of negotiating contracts with pharmaceutical manufacturers.</td>
</tr>
<tr>
<td></td>
<td>Explain the purpose of contracting.</td>
</tr>
<tr>
<td></td>
<td>State the types of contracts possible with pharmaceutical companies.</td>
</tr>
</tbody>
</table>
Identify the implications for the company and customer of a particular contract.

Explain strategies to ensure contract performance.

Schedule:
Longitudinal Learning Experience
• The learning experience will begin after orientation and continue throughout the year.
• Assignments made on a weekly basis by preceptor

Designated Meetings/Responsibilities (please list for resident when they occur, what time, and when):
• VISN PBM Workgroup (4th Friday/month)
• VISN MUM Team (2nd Wednesday/month)
• Clinical Pharmacy Practice Council (2nd Thursday every other month)
• NTL VISN Formulary Leader Meeting (2nd Monday/month)
• Reno P&T Meetings (4th Wednesday/month)
• Task Force Meetings (As assigned)
• VISN 21 Procurement Team (1st Wednesday/month)

Checklist of assignments/projects/requirements that must be complete to successfully pass the learning experience (please list deadlines if there are any):
• Drug Use Criteria Development
• Pharmacoeconomic VISN Analysis
• Website/SharePoint Maintenance
• Monthly MUM Team minutes
• Monthly PBM Workgroup minutes
• Develop an agenda for PBM Committee Meeting (July-Dec Resident A; Jan-June Resident B)
• Respond to email discussions and questions
• Provide evidence to support P&T decisions
• Participation in Pharmaceutical Representative presentations
• Quarterly metric analysis and performance grid update
• Understand contract design and pricing structures
• Provide Committee and Task Force Meetings with data support
• Conduct assigned prescription audits.
• Conduct a contract cost analysis comparing two or more drugs
• Perform data validation as required for special reports and projects.

Assigned Readings/Discussion topics:
1. National Monographs on new FDA drug approvals
2. National and VISN Drug Criteria for Use
3. VA Health Economics Resource Center
   • Data
• Courses and Seminars
  o Health Economics Cyber-Seminars Series
  o Cost-Effectiveness Analysis (CEA) Course
  o Econometrics Course
  o Economics Cyber Seminars in the QUERI Program
• Methods
  o Cost-Effectiveness Analysis
  o Methods for Cost Determination
  o Opportunity Costs
• Publications
  o Bibliography of VA Cost Studies
4. ASHP Statement on Pharmacist’s Responsibility for Distribution and Control of Drug Products
5. ASHP Guidelines for Selecting Pharmaceutical Manufacturers and Suppliers
6. ASHP Guidelines on Managing Drug Product Shortages
7. ASHP Guidelines on Medication Cost-Management Strategies for Hospitals and Health Systems
8. ASHP Policy Position 0207: Product Reimbursement and Pharmacist Compensation
9. ASHP Technical Assistance Bulletin on Hospital Drug Distribution and Control

11. Supply Chain Inventory VHA Directive 1761(1)
12. Pharmaceutical procurement and contracting lecture
13. All agenda items and background materials
14. Email and attachments
15. Literature searches to support program development
16. VISN Policy on PBM Workgroup
17. Others as selected by preceptor-resident agreement
Pharmacoeconomics and Health Outcomes

Updated 09/26/2018

Brief Learning Experience Descriptor:
The resident will develop skills, values and abilities in the practical application of pharmacoeconomic principles to the VA healthcare environment and in research design and methodologies to assess pharmaceutical-related economic, clinical, and humanistic health outcomes. The RPD, VASNHCs Pharmacoeconomics Pharmacist, and Data Mart Managers serve as the preceptor for this learning experience that begins after orientation and continues throughout the year. The resident will be assigned tasks and will work with a variety of VISN employees in diverse areas to accomplish tasks for this learning experience. Outcome projects will be developed and assigned by the preceptor at the direction of committees, task forces, informal groups and will be independent and group learning experiences.

Preceptors:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Mambourg, PharmD, BCPS, AAHIVP</td>
<td>VISN 21 Pharmacy Executive</td>
<td><a href="mailto:Scott.Mambourg@va.gov">Scott.Mambourg@va.gov</a></td>
<td>(775) 326-5724</td>
</tr>
<tr>
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<td>VASNHCs Pharmacoeconomics Pharmacist</td>
<td><a href="mailto:Amneet.Rai@va.gov">Amneet.Rai@va.gov</a></td>
<td>775-786-7200 ext. 5866</td>
</tr>
<tr>
<td>Jennifer Marin, Pharm.D, BCPS</td>
<td>VISN 21 PBM Data Manager</td>
<td><a href="mailto:Jennifer.Marin@va.gov">Jennifer.Marin@va.gov</a></td>
<td>562-340-1863</td>
</tr>
</tbody>
</table>

Goals and Associated Objectives formally taught and evaluated during this experience:

**Outcome R3: Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.**

**Goal R3.1:** Establish oneself as an expert for data retrieval, medication information, and outcomes-related resources within the organization.

<table>
<thead>
<tr>
<th>Objective</th>
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<tbody>
<tr>
<td>OBJ R3.1.1 (Synthesis) Implement a successful strategy for earning credibility within the organization to be an authoritative expert on the creation of analytic tools, measurement of outcomes, and overall evidence-based medication-related care of patients.</td>
<td>Identify opportunities for the pharmacy outcomes and healthcare analytic specialist to earn credibility with members of the various interdisciplinary taskforces. Identify opportunities for the specialist to earn credibility within the PBM and various providers within the organization.</td>
</tr>
<tr>
<td>OBJ R3.1.2 (Synthesis) Fulfill requests for provider-requested data, reports, usage/cost information, or outcomes in an accurate and efficient manner.</td>
<td>Fulfill data requests for individuals and taskforces as appropriate.</td>
</tr>
</tbody>
</table>
**OBJ R3.1.3**
(Comprehension) Answer questions and troubleshoot issues from users of the organization’s analysis tools, criteria, cost, or policies and procedures.

Support and answer inquiries related to drug costs and usage.

**Goal R3.2:**
Contribute pharmacist perspective and expertise regarding the development, implementation, utilization, and revision of outcomes measures and metrics, and analysis tools in interactions with information technology staff, PBM staff, clinicians and end users.

<table>
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<tbody>
<tr>
<td>OBJ R3.2.2 (Synthesis) When presented with a non-standard problem, apply lateral (out-of-box) thinking to its solution</td>
<td>Approach problems regarding pharmacoeconomic analysis from multiple avenues in order to solve a problem.</td>
</tr>
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</table>

**Goal R3.3:**
Critically evaluate and employ advanced analysis skills to relevant biomedical literature in preparing analysis tools, drug information responses, pharmacoeconomic proposals, and drug use criteria.

<table>
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<th>Objective</th>
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<tbody>
<tr>
<td>OBJ R3.3.1 (Evaluation) Determine if the study design and methodology are appropriate to accomplish the objectives of a piece of biomedical literature.</td>
<td>Understand and differentiate between research methodology to determine appropriateness for a given study.</td>
</tr>
<tr>
<td>OBJ R3.3.2 (Evaluation) Accurately interpret statistical information presented in a piece of biomedical literature.</td>
<td>Explain the application and interpretation of advanced statistical methods. Determine instances in which a study conclusion is erroneously supported by data display.</td>
</tr>
<tr>
<td>OBJ R3.3.3 (Analysis) Identify potential sources of bias in a piece of biomedical literature.</td>
<td>Critically evaluate medical literature.</td>
</tr>
<tr>
<td>OBJ R3.3.4 (Evaluation) Determine the internal and external validity of a piece of biomedical literature and if a study’s results have applicability for hypothesizing future research or for directing patient care decisions.</td>
<td>Evaluate the results and conclusions of medical literature to determine applicability to our VA population.</td>
</tr>
<tr>
<td>OBJ R3.3.5</td>
<td>Compare and contrast the reputations and peer-review procedures of biomedical journals.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>OBJ R3.3.6</td>
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<tr>
<td>(Evaluation) When presented with conflicting biomedical literature, determine the validity and applicability for organizational need.</td>
<td>OBJ R3.3.7</td>
</tr>
<tr>
<td>(Evaluation) When presented with limited evidence-based biomedical literature, synthesize a reasonable proposal for the specific information need in collaboration with members of relevant taskforces or workgroups.</td>
<td>OBJ R3.3.8</td>
</tr>
<tr>
<td>(Synthesis) Design tools and measures that perform patient-centered, evidenced-based monitoring for a therapeutic regimen or disease state that effectively evaluates achievement of the specified therapeutic goals.</td>
<td>OBJ R3.3.9</td>
</tr>
<tr>
<td>(Analysis) Conduct a pharmacoeconomic analysis to support a medication policy and/or process recommendation or decision (decision analysis, CEA, CBA, CMA, CUA).</td>
<td></td>
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</table>

**Goal R3.4:**
Identify opportunities for improving the safety of aspects of the organization’s medication-use system through analysis tools, measures, metrics, guidelines and policies.

<table>
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</thead>
<tbody>
<tr>
<td>OBJ R3.4.1</td>
<td>Update at least one DUC and present changes at the VISN PBM Meetings.</td>
</tr>
<tr>
<td>(Application) Assist in the organization’s reporting and preventing medication errors and adverse drug reactions (ADEs) through development/maintenance of analysis tools, updating DUC, reporting alerts at meetings, or other means as necessary.</td>
<td>Present safety updates at VISN PBM meetings.</td>
</tr>
</tbody>
</table>

**Outcome R4: Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>OBJ R4.1</td>
<td>Identify emerging issues in securing and integrating evidence-based information suitable for educational sessions.</td>
</tr>
<tr>
<td>(Application) Use effective educational techniques in the design of all educational activities.</td>
<td>Identify changes in medication-use or newly developed analysis tools that require training of staff within the organization.</td>
</tr>
<tr>
<td></td>
<td>Explain the differences in effective educational strategies when teaching colleagues versus residents versus students versus health professionals in other disciplines.</td>
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<td></td>
<td>Design instruction that meets the individual learner’s needs.</td>
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</tbody>
</table>
Explain how different instructional delivery systems (e.g., demonstration, written materials, web-based) foster different types of learning.

Design instruction that employs strategies, methods, and techniques congruent with the objectives for an education or training program.

**OBJ R4.1.2**
(Application) Use advanced public speaking skills to communicate effectively in large and small group situations.

- Explain techniques that can be used to enhance audience interest.
- Explain techniques that can be used to enhance audience understanding.
- Explain speaker habits that distract the audience.
- Explain the importance of developing excellence in public speaking for fulfillment of the role as a pharmacoeconomic pharmacist or data manager/analyst.
- Explain a systematic method for ongoing improvement in one’s own public speaking skills.

**Outcome R5: Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.**

**Goal R5.1:**
Demonstrate a working knowledge of available technology for prescribing, order processing, distribution/dispensing, monitoring, safe and efficient administration, administration documentation

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<tbody>
<tr>
<td>OBJ R5.1.1 (Comprehension) Demonstrate a working knowledge of available technology for prescribing, order processing, distribution/dispensing, monitoring, safe and efficient administration, administration documentation.</td>
<td>Understand the process of the CPRS &amp; VistA ordering and processing system to comprehend how data comes across into the database.</td>
</tr>
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</table>

**Outcome R7: Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.**

**Goal R7.5:**
Design evidence-based monitoring plans.

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</thead>
<tbody>
<tr>
<td>OBJ R7.5.1 (Synthesis) Design or redesign the patient-centered regimen to meet the evidence-based therapeutic goals established for the patient; integrates patient-specific information, disease, medication and non-medication-specific information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles.</td>
<td>Explain the use of evidence-based consensus statements and guidelines in the design of patient-specific therapeutic regimens. Accurately interpret best evidence for use in the design of a patient-centered regimen for a specific patient. Explain how to integrate seemingly applicable findings of best evidence with clinical judgment to arrive at an optimal evidence-based regimen for a specific patient. Explain additional concerns with adherence, persistence, cost, and route of administration when making decisions on medication regimens.</td>
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</table>

**Goal R7.6:**
Recommend regimens and monitoring plans.

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<tr>
<th>Objective</th>
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</thead>
</table>
OBJ R7.6.1  
(Application) Recommend or communicate the patient-centered, evidence-based, medication and/or non-medication, health improvement, wellness, and/or disease prevention regimen and corresponding monitoring plan to other members of the interdisciplinary team, and to the patient when appropriate, in a way that is systematic, logical, accurate, timely, and secures consensus.

Explain the importance of explicitly citing the use of best evidence when recommending or communicating a patient’s regimen and monitoring plan.

Explain what would be a pharmacist’s responsible professional behavior in the circumstance that a patient contests a proposed treatment.

Outcome E2: Utilize added knowledge and skills to enable the application of contemporary quality methodology to the management of pharmacy services.

Goal E2.1:  
Participate in clinical and economic outcomes analysis

<table>
<thead>
<tr>
<th>Objective</th>
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</thead>
</table>
| OBJ E2.1.1  
(Comprehension) Explain the principles and methodology of prospective clinical, humanistic, and economic outcomes analysis. | Explain the principles and methodology of basic pharmacoeconomic analyses.  
Explain the purpose of a prospective clinical, humanistic or economic outcomes analysis.  
Explain study designs appropriate for a prospective clinical, humanistic and economic outcomes analysis.  
Explain the technique and application of modeling.  
Explain the types of data that must be collected in a prospective clinical, humanistic and economic outcomes analysis.  
Explain possible reliable sources of data for a clinical, humanistic and economic outcomes analysis.  
Explain methods for analyzing data in a prospective clinical, humanistic and economic outcomes analysis.  
Explain how results of a prospective clinical, humanistic and economic outcomes analysis can be applied to internal business decisions and modifications to a customer’s formulary or benefit design. |
| OBJ E2.1.2  
(Comprehension) Explain the principles and methodology of retrospective clinical, humanistic, and economic outcomes analysis. | Explain the purpose of a retrospective clinical, humanistic or economic outcomes analysis.  
Explain study designs appropriate for a retrospective clinical, humanistic and economic outcomes analysis.  
Explain the types of data that must be collected in a retrospective clinical, humanistic and economic outcomes analysis.  
Explain the content and utilization of reports and audits produced by the pharmacy department.  
Explain possible reliable sources of data for a retrospective clinical, humanistic and economic outcomes analysis.  
Explain methods for analyzing data in a retrospective clinical, humanistic and economic outcomes analysis. |
Explain the impact of limitations of retrospective data on the interpretation of results.

Explain how results of a retrospective clinical, humanistic and economic outcomes analysis can be applied to internal business decisions and modifications to a customer's formulary or benefit design.

OBJ E2.1.3: (Evaluation) Contribute to a retrospective clinical or economic outcomes analysis.

Evaluate a pharmacoeconomic proposal retrospectively to determine actual impact on the VISN.

**Schedule:**

Longitudinal Learning Experience with an Extended Component at VASNHCS

- The learning experience will begin after orientation and continue throughout the year.
  - Two separate components of experience:
    - Longitudinal minimum 4 hours/weekly working with VASNHCS Pharmacoeconomics Pharmacist to learn the role of a local/single department pharmacoeconomist
    - Working with RPD/VISN 21 Pharmacy Executive and Data Mart Managers on VISN-level pharmacoeconomics/outcomes projects
  - Assignments made on a daily/weekly basis by preceptors

**Designated Meetings/Responsibilities (please list for resident when they occur, what time, and when):**

- VISN PBM Workgroup (4th Friday/month)
- VISN MUM Team (2nd Wednesday/month)
- Reno P&T Meetings (4th Wednesday/month)
- Task Force Meetings (As assigned)

**Checklist of assignments/projects/requirements that must be complete to successfully pass the learning experience (please list deadlines if there are any):**

- Knowledge demonstration of data capture and retrieval from PBM Data Warehouse
- Performance Measure and Monitors Grid Update
- 4-5 P’Econ Analyses in support of MUM team projects
- Participate in Pharmacy Education Programs
- Data support for 4-5 outcomes projects
- Participate in Performance Metric Design and Implementation
- As needed, DUEs, P&T presentations (local and VISN), tablet optimization/contract initiatives, consult development, education to appropriate staff, etc.

**Assigned Readings/Discussion topics:**

2. Economic Literacy 2nd Edition by Weaver
3. Others as selected by preceptor-resident agreement
Brief Learning Experience Descriptor:
This rotation is an extended learning experience that will help residents become familiar with the key principles utilized in health systems for leadership and overall practice improvement. The RPD/VISN 21 Pharmacy Executive will serve as the primary preceptor and evaluator for this experience; though the resident will be precepted by other management/leaders within the organization as well. 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. During the residency, practice foundation skills and values will be taught and observed by preceptors and the experience will be individualized based on the resident’s baseline knowledge and growth throughout the year. The resident will participate in a number of activities designed to improve their working knowledge and experience with leadership concepts. 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. 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.

Preceptors:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Scott Mambourg, PharmD, BCPS, AAHIVP</td>
<td>VISN 21 Pharmacy Executive</td>
<td><a href="mailto:Scott.Mambourg@va.gov">Scott.Mambourg@va.gov</a></td>
<td>775-326-5724</td>
</tr>
<tr>
<td>Beth Foster, RPh.</td>
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<td>775-326-2712</td>
</tr>
<tr>
<td>Other preceptors, as assigned</td>
<td></td>
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</tbody>
</table>

Goals and Associated Objectives formally taught and evaluated during this experience:

<table>
<thead>
<tr>
<th>Outcome R1: Demonstrate effective leadership and practice management skills in the areas of administration, analytics, informatics, and outcomes.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal R1.1:</strong> Exhibit ongoing development of the essential personal skills of a practice leader.</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td>OBJ R1.1.1 (Characterization) Practice self-managed continuing professional development with the goal of improving the quality of one’s own performance through self-assessment and change.</td>
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<tr>
<td>OBJ R1.1.2</td>
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<td>OBJ R1.1.3</td>
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<td>OBJ R1.1.4</td>
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<td>OBJ R1.1.5</td>
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<tr>
<td>OBJ R1.1.6</td>
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</table>
**Goal R1.2:**
Contribute to the leadership and management activities within the pharmacy outcomes and healthcare analytics field by exercising superior communication and political skills.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>OBJ R1.2.1</strong>&lt;br&gt;(Analysis) When confronted with a barrier to the accomplishment of a particular project, analyze the organizational environment, including its structure, network of resources, and politics, to determine a strategy for achieving success.</td>
<td>Explain the potential conflicts inherent in the objectives of one’s health care organization and the objectives of a pharmaceutical industry representative.</td>
</tr>
<tr>
<td></td>
<td>Appraise current policies governing relations between the organization and the pharmaceutical industry to ensure that ethical practices are observed.</td>
</tr>
<tr>
<td></td>
<td>Explain why pharmaceutical industry representatives regard PBM staff members and pharmacy outcomes specialists as influential individuals in their organization.</td>
</tr>
<tr>
<td></td>
<td>Explain the appropriate relationship between the drug information specialist and a pharmaceutical industry representative.</td>
</tr>
<tr>
<td><strong>OBJ R1.2.2</strong>&lt;br&gt;(Synthesis) Create an effective professional network.</td>
<td>Explain the organization’s structure including the function of each of its departments and key individuals.</td>
</tr>
<tr>
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<td>Explain the importance of effective networking in removing barriers.</td>
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<td></td>
<td>Explain how to identify key stakeholders of a given project.</td>
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<tr>
<td></td>
<td>Explain the importance of persuasion as a skill of effective leaders.</td>
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<tr>
<td></td>
<td>Compare and contrast the types of persuasive arguments that are potentially effective.</td>
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<tr>
<td></td>
<td>Identify formal and informal medical staff leaders and how they can help achieve the desired goal.</td>
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</table>

**Goal R1.3:**
Exercise practice leadership.

<table>
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</thead>
<tbody>
<tr>
<td><strong>OBJ R1.3.1</strong>&lt;br&gt;(Characterization) Demonstrate enthusiasm and passion for the profession of pharmacy.</td>
<td>Attendance of pharmacy-related meetings</td>
</tr>
<tr>
<td></td>
<td>Participation in community service and/or organization activities</td>
</tr>
<tr>
<td><strong>OBJ R1.3.2</strong>&lt;br&gt;(Comprehension) Explain the nature of mentoring in pharmacy, its potential connection with achievement, and the importance of being willing to serve as a mentor to appropriate individuals.</td>
<td>Precepting of pharmacy students or PGY1 residents</td>
</tr>
<tr>
<td><strong>OBJ R1.3.3</strong>&lt;br&gt;(Comprehension) Explain the general processes of establishing and maintaining an ASHP-accredited PGY-2 residency program.</td>
<td>CQI Survey</td>
</tr>
</tbody>
</table>
Outcome R3: Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.

Goal R3.5:
Assist the organization in achieving compliance with accreditation, legal, regulatory, and safety requirements related to the use of medications (e.g., Joint Commission requirements; ASHP standards, statements, and guidelines; state and federal laws regulating pharmacy practice; OSHA regulations).

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<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
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</thead>
<tbody>
<tr>
<td>OBJ R3.5.1</td>
<td>Explain the influence of accreditation, legal, regulatory, and safety requirements on clinical practice.</td>
</tr>
</tbody>
</table>

Outcome R4: Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.

Goal R4.2:
Design and deliver education programs to the public that center on health improvement, wellness, and disease prevention.

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<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
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</thead>
<tbody>
<tr>
<td>OBJ R4.2.1</td>
<td>Participate in Pharmacy Week at the VASNHCs Medical Center</td>
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<td>Participate in community service activities (ex. Prescription Drug Roundups) or local/national organization events.</td>
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</table>

Goal R4.3:
Design and present Academic Detailing education programs to healthcare providers and patients in order to improve patient outcomes.

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<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
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</thead>
<tbody>
<tr>
<td>OBJ R4.3.1</td>
<td>Explain appropriate medication-related educational topics for health care support groups.</td>
</tr>
<tr>
<td></td>
<td>Explain appropriate medication-related educational topics for the general public.</td>
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<tr>
<td>OBJ R4.3.2</td>
<td>Explain how to use analysis tools via virtual training sessions.</td>
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<tr>
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<td>Explain how available analysis tools can assist academic detailers</td>
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<tr>
<td></td>
<td>Participate in Academic Detailing meetings and initiatives</td>
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</tbody>
</table>

Schedule:
Extended Learning Experience

Designated Meetings/Responsibilities (please list for resident when they occur, what time, and when):
- PBM Staff Meetings (Fridays 09:00am to 10:30am)
- Resident Leadership Conference (Every 2nd Wed and 4th Friday at 3:30pm)
- VISN PBM Workgroup (4th Friday/month)
- Clinical Practice Council (2nd Thursday every other month)
- NTL VISN Formulary Leader Meeting (2nd Monday/month)
- Executive Leadership Meetings (Every other month as assigned)
- Reno P&T Meetings (4th Wednesday/month)
- One local or state meeting and one national professional meeting (must be pharmacy-related)
  - Attend ASHP Midyear Meeting and residency booth recruitment (December)
- Attend Nevada State Board of Pharmacy meetings held in Northern Nevada (Reno)
- Attend Nevada Board of Pharmacy Meeting(s)
- Community Service Activity
- Help plan/facilitate Pharmacy Week (*Usually 3rd week in October*)
- NVSHP involvement (*Annual Meeting if possible*)
- Taskforce Meetings (*As assigned*)
- Institutional Review Board (IRB) meetings (*Optional*)
- Regulatory Preparation meetings (e.g. Joint Commission, ASHP, etc.) – (*Optional*)

*The resident may be excused from some of these programs with permission from the residency director if they conflict with scheduled patient care activities or other projects.*

### Checklist of assignments/projects/requirements that must be complete to successfully pass the learning experience (please list deadlines if there are any):
- As assigned by the VISN 21 Pharmacy Executive and VASNHCS Chief of Pharmacy

### Evaluation process:
The resident will be evaluated on the objectives noted above. Formative evaluations will be completed as needed with verbal feedback given continually throughout the experience. The resident will complete scheduled self-evaluations and the preceptor will complete a scheduled summative evaluation of the resident.

### Assigned Readings/Discussion topics:
1. Leadership Lecture Series ([see schedule below](#)) topics include:
   a. Professionalism
   b. Career planning
   c. [Whitney Award Winners](#)
   d. Strength Finders (Gallup Training) – purchased for each resident – ongoing
   e. HBDI (whole brain thinking) – ongoing
   f. Annual Pharmacist Workshop
   g. Nevada Law CE
   h. Interviewing Skills
   i. Axiom “Leadership Lessons” for a Lifetime
      - Vision and Strategy
      - Teamwork and Communication
      - Activity and Assessment
      - Personal Integrity
      - Hiring for talent
   j. LEAN Management
2. *Immortal Life of Henrietta Lacks*

### Additional Potential Assigned Readings/Discussion topics:
During the course of the rotation/longitudinal experience, the residents may be required to participate in some of the following activities, readings, or projects as assigned by the preceptor.
1. Watch at least one of the following videos and discuss your impression:
   a. [ASHP Foundation Leadership videos](#)
b. Whitney Award Winner Interview Videos

2. Complete a leadership self-assessment on the ASHP Foundation Leadership Website

3. Review examples of leadership resources:
   a. ASHP Center for Health-System Pharmacy Leadership, Leadership Resource Center
   b. ASHP Practice Manager
   c. Center for Creative Leadership
   d. Harvard Business Review (**Recommend signing up for daily tips)
   e. Emotional Intelligence
   f. ASHP Leadership Toolkit

4. Write a personal mission statement, reflecting on the philosophy of leadership

5. Review and assess departmental organizational chart

6. Discuss the roles of pharmacy leaders related to:
   a. Local, state, national organizations
   b. State boards of Pharmacy
   c. Legislative actions
   d. Role in the Food and Drug Administration (FDA), Drug Enforcement Agency (DEA), Center for Medicare and Medicaid Services (CMS)

7. Manager vs. Leader

8. General Leadership
   m. Derescewicz W. Solitude and leadership, American Scholar, Spring 2010.
9. Clinical Leadership/Non Traditional Leadership
10. Leading People (Coaching/Counseling/Evaluations)
11. Mission/Vision
   a. Review organization and department mission/vision statements
12. Strategic Planning
13. Communication
14. Time Management/Work-Life Balance
15. Networking
16. Social/Emotional Intelligence
17. Stressful situations
18. Recruitment
19. Mentoring
20. Change Management
21. Performance Improvement
   a. Six Sigma and Lean topics
   b. Project management skills topics
22. Personal Change
23. Decision Making
   c. ASHP Code of Ethics for Pharmacists
**Population Management**

*Updated 09/26/2018*

**Brief Learning Experience Descriptor:**
This is an extended learning experience intended to provide continued clinical practice in combination with population management throughout the residency year. The resident will be working with the Reno VA (VASNHCS) Pharmacy Service and available VISN 21 dashboard tools to improve patient safety, quality and other outcomes. The resident will be assigned to this experience ½ day/week throughout the year. With two PGY2 residents, each will be on rotation for 5 months of the year for this longitudinal experience (excluding July and December). The purpose of this rotation is to continue to expose the resident to direct patient care through the use of analysis tools to identify/target patients based on local needs at the Reno VA (to assist in meeting metrics, measures, or fulfilling another patient care need). This will maintain and improve the resident’s clinical abilities while allowing them the opportunity to utilize tools they are creating in order to provide the perspective of an end-user. The resident will not only collect and analyze patient information from the analysis tools, but work in collaboration with other healthcare providers at the medical center to create patient plans and directly involve themselves in patient care as necessary.

**Preceptors:**

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Scott Mambourg, PharmD,</td>
<td>VISN 21 Pharmacy Executive</td>
<td><a href="mailto:Scott.Mambourg@va.gov">Scott.Mambourg@va.gov</a></td>
<td>(775) 326-5724</td>
</tr>
<tr>
<td>BCPS, AAHIVP</td>
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</tr>
<tr>
<td>Janice Taylor, Pharm.D.,</td>
<td>VISN 21 PBM Data Manager</td>
<td><a href="mailto:Janice.Taylor5@va.gov">Janice.Taylor5@va.gov</a></td>
<td>775-326-5727</td>
</tr>
<tr>
<td>BCPS</td>
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<tr>
<td>Other preceptors, as</td>
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**Goals and Associated Objectives formally taught and evaluated during this experience:**

**Outcome R2: Manage and improve the medication-use process**

**Goal R2.1:**
Develop collaborative professional relationships with members of the PBM staff, various health care teams, taskforces, and workgroups.

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<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
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<tbody>
<tr>
<td>OBJ R2.1.1</td>
<td>Explain the value of good peer relationships in the achievement of projects.</td>
</tr>
<tr>
<td></td>
<td>Explain methods for achieving consensus.</td>
</tr>
<tr>
<td></td>
<td>Explain how to create an agenda for a meeting.</td>
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75
Explain methods for assuring participation by all members of a group.

Explain methods for effective group leadership.

Explain the roles and responsibilities of the facilitator of a meeting.

Explain effective strategies for facilitating meetings.

Participate in VISN Formulary Leader calls and agenda

| OBJ R2.1.2 | 
| (Analysis) Determine the appropriate type of communication, and the medium and organization for it, using an understanding of the target audience, the characteristics of the information to be communicated, effectiveness, efficiency, customary practice and the recipient's preferences. | 
| | 
| Accurately identify the primary theme or purpose of one’s written, oral, or virtual communication. | 
| Accurately determine what information will provide credible background to support or justify the primary theme of one’s communication. | 
| Logically sequence ideas in written and oral communication. | 
| Accurately determine the depth of communication appropriate to one’s audience. | 
| Accurately determine words and terms that are appropriate to one’s audience. | 
| Accurately determine one’s audience’s needs. | 
| Accurately identify the length of communication that is appropriate to the situation. | 
| Explain the importance of assessing the receiver’s understanding of the message conveyed. | 
| Explain techniques for persuasive communication. | 
| Explain the value of consulting with administrators and key decision-makers when choosing route(s) for communication of information. | 
| Explain issues, including confidentiality, surrounding the choice of media to communicate information. | 
| Explain the differences in language (e.g., jargon, acronyms) used to communicate among the various disciplines involved in pharmacy outcomes and healthcare analytics. | 
| Explain the importance of adjusting one’s communications for the specific category of health professional (e.g., nurses, physicians, etc.). | 

**Outcome R7: Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.**

**Goal R7.1:** Collect and analyze patient information.
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>OBJ R7.1.1</td>
<td>Use an appropriate dashboard or report to identify patients to deliver care.</td>
</tr>
<tr>
<td>OBJ R7.1.2</td>
<td>Place a patient note in the medical record with appropriate documentation of pharmaceutical care provided.</td>
</tr>
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</table>

**Goal R7.2:** Establish collaborative pharmacist-patient and pharmacist-caregiver relationships.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
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<tbody>
<tr>
<td>OBJ R7.2.1</td>
<td>Explain the importance of describing to the patient the pharmacy specialist’s role in his/her care.</td>
</tr>
<tr>
<td></td>
<td>Explain potential barriers to relationship development with individual patients (age, mental status, educational level, health literacy).</td>
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<td></td>
<td>Explain the views of diverse cultures and religions on the conceptualization of illness, treatment, and of death and dying.</td>
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**Goal R7.3:** Appropriately triage patients if necessary.

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<tbody>
<tr>
<td>OBJ R7.3.1</td>
<td>Understand when dealing in patient care activities when to defer to your preceptor or other provider.</td>
</tr>
<tr>
<td>OBJ R7.3.2</td>
<td>Follow-up on patients who have been referred to other providers to determine that their care has continued appropriately.</td>
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</table>

**Goal R7.4:** Design evidence-based therapeutic regimens.

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<th>Related Activity/Instructional Objectives</th>
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<tbody>
<tr>
<td>OBJ R7.4.1</td>
<td>Explain the use of evidence-based consensus statements and guidelines in the setting of patient-specific therapeutic goals.</td>
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<td>Explain how culture influences patients’ perceptions of desirable outcomes.</td>
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<td>Explain the importance of the patient’s perception of desirable outcomes when setting therapeutic goals for a patient with functional limitations.</td>
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<td>Explain the impact of quality-of-life issues on making decisions about therapeutic goals.</td>
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</table>
Explain ethical issues that may need consideration when setting therapeutic goals.

Compare and contrast the realistic limits of treatment outcomes among the various care settings.

Explain how a patient's age or mental status might affect the setting of therapeutic goals.

Explain the patient's role in determining his/her therapeutic goals.

### Goal R7.5:
Design evidence-based monitoring plans.

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<tbody>
<tr>
<td>OBJ R7.5.1</td>
<td>Explain the use of evidence-based consensus statements and guidelines in the design of patient-specific therapeutic regimens.</td>
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<tr>
<td></td>
<td>Accurately interpret best evidence for use in the design of a patient-centered regimen for a specific patient.</td>
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<td></td>
<td>Explain how to integrate seemingly applicable findings of best evidence with clinical judgment to arrive at an optimal evidence-based regimen for a specific patient.</td>
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<td>Explain additional concerns with adherence, persistence, cost, and route of administration when making decisions on medication regimens.</td>
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### Goal R7.6:
Recommend regimens and monitoring plans.

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<th>Objective</th>
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<tbody>
<tr>
<td>OBJ R7.6.1</td>
<td>Explain the importance of explicitly citing the use of best evidence when recommending or communicating a patient’s regimen and monitoring plan.</td>
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<td></td>
<td>Explain what would be a pharmacist’s responsible professional behavior in the circumstance that a patient contests a proposed treatment.</td>
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### Goal R7.7:
Design education for a patient’s regimen and monitoring plan.

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<tr>
<td>OBJ R7.7.1</td>
<td>Explain strategies for convincing patients of the importance of adhering to their therapeutic plans.</td>
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### Goal R7.8:
Implement regimens and monitoring plans.

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<tbody>
<tr>
<td>OBJ R7.8.1</td>
<td>Use an appropriate dashboard or report to identify patients to deliver care.</td>
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targeting, monitoring, and continued intervention as well as to reduce potential error.

**Goal 7.9:**
Evaluate patient progress and redesign regimens and monitoring plans.

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<tbody>
<tr>
<td>OBJ R7.9.1 (Evaluation) Accurately assess the patient’s progress toward the therapeutic goal(s).</td>
<td>Follow-up with patients as appropriate to determine efficacy of actions.</td>
</tr>
<tr>
<td>OBJ R7.9.2 (Synthesis) Redesign the patient’s regimen and monitoring plan as necessary, based on evaluation of monitoring data and therapeutic outcomes.</td>
<td>Gather data as specified in a monitoring plan. Explain factors that may contribute to the unreliability of monitoring results (e.g., patient-specific factors, timing of monitoring tests, equipment errors, and outpatient versus inpatient monitoring). Determine reasons for a patient’s progress or lack of progress toward the stated health care goal. Explain the importance of the analysis of trends over time in monitoring parameter measurements. Accurately assess the effectiveness of a patient-specific education.</td>
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**Goal 7.10:**
Communicate pertinent patient information to facilitate continuity of care.

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<tr>
<td>OBJ R7.10.1 (Application) Ensure that accurate and timely patient-specific information reaches those who need it at the appropriate time.</td>
<td>Notifying other providers of pertinent information in order to ensure the continuity of patient care through appropriate communication. Explain potential problems that may place patients at risk in various treatment settings (e.g., hospital, clinic, home) or upon change in level of care. Explain accrediting organizations’ requirements for medication reconciliation across the continuum of care. Explain methods for coordinating information between multiple pharmacy and other health care workers serving the needs of patients that will facilitate the provision of pharmaceutical care.</td>
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<tr>
<td>OBJ R7.10.2 (Synthesis) Formulate a strategy for continuity of pharmaceutical care across all applicable treatment settings.</td>
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**Goal 7.11:**
Document direct patient-care activities appropriately.

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<tbody>
<tr>
<td>OBJ R7.11.1 (Application) Write timely and authoritative consults and notes according to the organization’s policies and procedures.</td>
<td>Explain the organization’s policies and procedures for documenting direct patient-care activities. Explain the content and format of progress notes.</td>
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</tbody>
</table>

**Schedule:**
Extended Learning Experience
- The learning experience will begin after orientation and the residents will alternate their time participating in this learning experience with the local pharmacoeconomics experience at the medical center.
• Resident is expected to participate in the experience at least 4 hours weekly when on the rotation.
• May be expected to travel to VASNHCS medical center for clinic and/or direct patient care activities

**Designated Meetings/Responsibilities (please list for resident when they occur, what time, and when):**

- Monthly Anticoagulation Round Table (*Last Monday/Month from 12:00pm to 1:00pm*)
- Meet with preceptor for assignment of ½ day/week using population management techniques, analysis tools, and clinical/patient care abilities to target/contact patients and improve overall care

**Checklist of assignments/projects(requirements that must be complete to successfully pass the learning experience (please list deadlines if there are any):**

- **Work with VASNHCS preceptor** to determine appropriate population/metric to target
- **Utilize analysis tools** to identify high risk patients for population management activity
- **Evaluate patient profiles** for drug-related problems
- ** Appropriately monitor and evaluate therapy** based on indication/formulary choices
- **Make recommendations** to physicians as needed
- **Answer drug information questions** for nurses, physicians, patients
- **Document adverse events** in VISTA with “PIR” or Patient incident report” access
- **Document your interventions** in the computer and in CPRS
- **Examples of population management projects that may be incorporated into the experience:**

1. Residents will screen patients by TTR using the clinical dashboard on the VISN PBM SharePoint site. Those with poor TTR will be identified for a formal risk-benefit assessment and place an anticoagulation eConsult. The resident involved in the case will work directly with the eConsultant to evaluate these cases and make a recommendation. Once this has been made, the resident and/or preceptor(s) will work with the primary care provider or appropriate specialist (i.e. Cardiology) to determine the most appropriate course of action. This may include discontinuation of anticoagulation therapy or conversion to an alternative agent (i.e., Dabigatran, Rivaroxaban, or antiplatelet therapy).

2. Using the clinical performance dashboard, patients with atrial fibrillation will be sorted into two groups: CHADS2 = 0 or CHADS2 > 1. Patients w/ CHADS2 = 0 who are receiving anticoagulation therapy will be reviewed for appropriateness. Resident will be required to collaborate with providers when making modifications/interventions to patient regimens.

3. Using the clinical performance dashboard, patients with atrial fibrillation who are receiving both therapeutic anticoagulation therapy (i.e. warfarin, dabigatran, rivaroxaban, etc.) PLUS antiplatelet therapy (single or dual) will be identified and have the therapy reviewed for appropriateness, with the resident’s assistance. Based on this evaluation, resident may need to collaborate with providers regarding therapy modification.
4. Longitudinal experience may be expanded to other non-anticoagulation population management projects. Other areas of intervention may include pain management, CLC, osteoporosis, oncology, antimicrobial stewardship, etc. Rotation experiences will be offered in those areas where VISN 21 population Dashboards are available that identify gaps in care.

**Assigned Readings/Discussion topics:**

Clinical Research Project

**Brief Learning Experience Descriptor:**
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 as well as the Research Pharmacist from the VASNHCS 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 ASHP Midyear Clinical Meeting and a PowerPoint presentation at the annual Western States Conference.

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<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Scott Mambourg, PharmD, BCPS, AAHIVP</td>
<td>VISN 21 Pharmacy Executive</td>
<td><a href="mailto:Scott.Mambourg@va.gov">Scott.Mambourg@va.gov</a></td>
<td>775-326-5724</td>
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<td>Mostaqul Huq, PharmD, PhD</td>
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<td>775-786-7200</td>
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**Goals and Associated Objectives formally taught and evaluated during this experience:**

**Outcome R8:** Contribute to the body of pharmacotherapy knowledge by conducting outcomes-based research or quality improvement projects with the assistance of analysis tools.

**Goal R8.1:**
Conduct a pharmacy outcomes and/or health analytics-related research or QI project using effective research and project management skills.

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<thead>
<tr>
<th>Objective</th>
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<tbody>
<tr>
<td>OBJ R8.1.1 (Synthesis) Identify a topic of significance for a pharmacy-related research project that requires institutional review board (IRB) review or approval through a quality improvement (QI) process.</td>
<td>Explain the types of resident projects (e.g., prospective, retrospective, clinical trials) that will meet residency program project requirements and timeframe. Explain how one determines if a potential project topic is of significance in one’s particular practice setting. Explain how to conduct an efficient and effective literature search for the background analysis. Explain how to generate a research question(s) to be answered by an investigation.</td>
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<tr>
<td>Objective</td>
<td>Related Activity/Instructional Objectives</td>
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<tr>
<td>OBJ R8.1.2</td>
<td>Explain the elements of a project proposal. Explain how to identify health care personnel who will be affected by the conduct of the project and strategies for gaining their cooperation. Explain how to determine a timeline with suitable milestones that will result in project completion by an agreed-upon date. Explain various methods for constructing data collection tools.</td>
</tr>
<tr>
<td>OBJ R8.1.3</td>
<td>Explain how to identify stakeholders who must approve a particular project. Explain the components that make up a budget for a project. Explain strategies for seeking funding for a research project. Explain the role of the IRB in the approval process.</td>
</tr>
<tr>
<td>OBJ R8.1.4</td>
<td>Given a particular approved residency project, explain methods for organizing and maintaining project materials and documentation of the project’s ongoing implementation. Explain methods of data analysis. Explain issues surrounding confidentiality of patient information accessed for a research study.</td>
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**Goal R8.2:**
Engage in the publication process.

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<th>Objective</th>
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<tbody>
<tr>
<td>OBJ R8.2.1</td>
<td>Understand the purpose of performing a research or QI project.</td>
</tr>
<tr>
<td>OBJ R8.2.2</td>
<td>Use a standard style for biomedical journals in the preparation of research articles, reviews, or case reports submitted for publication. Given a specific article, identify appropriate journals to which that article might be submitted for publication. Given an identified topic related to pharmacy practice, appraise the potential to publish an article on that topic. Explain the rules governing who may declare authorship of a given work.</td>
</tr>
<tr>
<td>OBJ R8.2.3</td>
<td>Use correct grammar, punctuation, spelling, style, and formatting conventions to prepare a written summary of a pharmacy-related research project.</td>
</tr>
<tr>
<td>OBJ R8.2.4</td>
<td>Determine a journal appropriate for the project to submit to.</td>
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</table>
OBJ R8.2.5
(Synthesis) Successfully employ accepted manuscript style to prepare a final report of a pharmacy-related research project.

When given a particular residency project ready for presentation, explain the type of manuscript style appropriate to the project and criteria to be met when using that style.

OBJ R8.2.6
(Evaluation) Participate in the peer review of a pharmacy professional’s article submitted for publication or presentation.

Explain sources of information on the components of a peer review.

Explain the characteristics of an effective peer review.

Goal R8.3:
Prepare and deliver an effective poster presentation.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJ R.8.3.1</td>
<td>Design an effective poster for the presentation of a topic.</td>
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<tr>
<td></td>
<td>Explain the types of content that should be included in a poster.</td>
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<tr>
<td></td>
<td>Explain the rules for visual presentation of poster material.</td>
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<tr>
<td></td>
<td>Explain resources that can be used to generate poster materials.</td>
</tr>
<tr>
<td>OBJ R8.3.2</td>
<td>Exercise skill in responding to questions occurring during the presentation of a poster.</td>
</tr>
<tr>
<td></td>
<td>ASHP Midyear Clinical Meeting Poster Presentation Session</td>
</tr>
<tr>
<td>OBJ R8.3.3</td>
<td>Effectively present the results of a pharmacy-related research project.</td>
</tr>
<tr>
<td></td>
<td>ASHP Midyear Clinical Meeting Poster Presentation Session</td>
</tr>
</tbody>
</table>

**Designated Meetings/Specific Responsibilities:**

**Written Assignments**

1. Residency Project Proposal
2. ASHP Midyear Clinical Meeting Poster Presentation Abstract
3. Regulatory Application(s) for project
   - Quality Improvement (QI) (non-research) Form
   - OR -
   - UNR Internal Review Board Application (Research)
   - Research and Development Committee Application (Research)
4. Western States Conference (formerly “Asilomar”) Project Abstract
5. Western States Conference Handout (to compliment project presentation)
6. Regulatory Closure of Project (for research projects only, does not apply to QI projects)
   - UNR Internal Review Board Application (Research)
   - Research and Development Committee application (Research)
7. Project Manuscript

**Presentations:**

1. ASHP Midyear Clinical Meeting: Project Poster
2. Western States Conference: Presentation of Project
3. NVSHP Meeting: Presentation of Project

**Security Clearance for Projects:**

**PGY-2 Residents and Fellows:**

1. Read access to VistA/CPRS – All Stations – Diana Higgins
2. Read and write access to V21 Server Cluster (r01scrdwh60, r01scrdwh61, r01scrdwh65) – Joy Meier to Region I
3. **CDW Access**—Joy Meier
4. **Dashboard security request** – Diana Higgins
5. **Remote Desktop Connection Installation** – Janice Taylor to Reno IRM
6. VISON 21 DSS/VSSC Reports – online forms/Diana Higgins to Austin Automation Center
7. National PBM Cubes—Alan Celestino (cc VPE/Diana Higgins)
8. Mail groups—Diana Higgins

**Evaluations (via PharmAcademic)**
1. A snapshot or a longitudinal summative evaluation will be completed on a quarterly basis by the residency program director for this learning experience.
2. A snapshot or a longitudinal summative self-evaluation will be completed by the resident on a quarterly basis.
3. A summative evaluation will be completed upon the completion of the project by the research pharmacist and/or the residency program director.
4. The resident will complete a summative self-evaluation upon completion of the learning experience.
5. The resident will also complete a preceptor and learning experience evaluation upon the completion of the learning experience.

**Assigned Readings/Discussion topics:**

**Required:**

**Optional:**
Project/Proposal/Manuscript Process and Schedule

Implementation/Data Collection:
The resident must receive approval from the Residency Committee prior to initiating the project. The project advisor and program director must be apprised of the progress and all problems encountered in a timely manner. The resident must meet with the project advisor at least monthly to discuss the progress and report on progress to the program director. The Project Resources folder on the V21PBMShare drive will include useful resources – including proper forms. The following are useful examples for residents:

For examples of a blank form to differentiate QI vs. Research, completed QI form, application/HIPAA waiver, manuscript for Research Project (IRB/R&D Approved) or manuscript for QI Project, please contact ????.

Presentation:
For both the proposal and the presentation of the results, the resident must demonstrate to the Residency Committee a thorough understanding of the topic, the methods, any shortcomings of the study and the results and conclusions supported by the project. The prepared presentation should be 15 minutes with the remainder of the time left for questions and answers (5 minutes). Audiovisuals should be used to enhance the presentation as appropriate and per Western States guidelines with handouts of the presentation provided to facilitate feedback from preceptors. WSC Guideline information can be found here: http://www.westernstates-rx.org/index.php/abstract-presentation-preparation

Quality:
The resident must meet scientific standards for quality in all aspects of the project. The resident may be required to repeat any or all aspects of the project if the standards are not met. The resident will not receive a residency certificate if the project is not completed or if a final paper suitable for publication is not submitted by the approved deadline. Suitability will be determined by the residency advisor and program director with the advice of the Residency Board.

Format for Proposal/Manuscript (Also follow IRB requirements)

Introduction
• Clear statement of the question/problem to be addressed
• Rationale and background information (including literature review) to justify the project
• Significance of the problem
• Possible solutions
• Study objectives/purpose
• Hypothesis

Methodology
• Study Design
  • Selection and/or inclusion/exclusion criteria, randomization, blinding, sample size and population
  • Control and treatment groups
  • End points—definition and method of measure
• Timetable for completion
• Data collection
  • What data will be collected, when, how often and by whom
  • Patient consent form if required
• Analysis
  • Objective
  • Subjective
  • Statistical analysis

Resources
• Resources available/needed
• Budget

Investigators
• Resident’s role and role of others

Results*
• Data Presentation
  • Outcome
  • Subjects completing the study—number included, etc.
  • Drop outs, reasons for dropouts
  • Demographics
• Response rates/other means of reporting results
• Statistical analysis and significance
• Subjective results and trends

Discussion*
• Interpretation of results
• Comparison with other studies
• Implications

Conclusions*
References/Bibliography

*Only required for final paper (not for proposal)
The resident is given appropriate time during orientation to complete research training. During the first several months the resident is encouraged to select a project and begin study development. IRB R&D or QI approval should be secured as appropriate to the study design. Data collection and study conduct should be given significant time in December and January. The following timeline should provide a rough idea of how the project should proceed throughout the residency year.

<table>
<thead>
<tr>
<th>Month</th>
<th>Due Date</th>
<th>Description</th>
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</thead>
</table>
| July          | On scheduled meeting date | Meet research staff  
Research Department:  
Dr. Elizabeth Hill (Associate Chief of Research)  
Pharmacy Department  
Mostaquil Huq (Research Pharmacist)  
On scheduled meeting date | Receive information on available projects  
Research pharmacist, Residency director and preceptors will meet with residents as a group to describe available research projects and ideas  
Last Thursday of the month | Complete CITI Training – Web based training  
Complete TMS training – titled “Ethics Most Wanted”  
Print 2 completion certificates, place one copy in your residency binder and give the other to the research pharmacist [research pharmacist will fax a copy to the research department for their records]  
Choose project for residency year  
Email research pharmacist ([Mostaquil.Huq@va.gov](mailto:Mostaquil.Huq@va.gov)) chosen project and project preceptor name | |
| August        | When posted by ASHP (date varies) | ASHP Midyear Clinical Meeting poster submission site for students, residents and fellows opens.  
Become familiar with submission process and poster guidelines, as you will be submitting a poster of your planned project. Applications are due by October 1st to ASHP. (*Midyear poster may be different than year-long residency project*)  
Third Thursday of the month | Complete draft of research proposal and present to staff at VISN 21 PBM Staff meeting  
- Be prepared to talk about your project idea and proposed methods for about 5 minutes, and take notes on questions and suggestions for your final draft  
Last Friday of the Month | Final draft of research proposal, with prior approval from preceptor, due to research pharmacist  
Email document to research pharmacist, and cc project preceptor(s), noting that this has been approved as a final draft | |
| September     | Third Friday of the Month  | Arrange and execute a meeting with project preceptor(s), research pharmacist, and residency director to discuss project status as “Quality Improvement” or “Research”  
Different regulatory requirements must be met based on the intent and structure of the project. This meeting will determine which forms and approvals must be completed for the resident to proceed.  
Last Friday of the Month | ASHP Midyear Clinical Meeting poster submission due  
Follow directions at www.ASHP.org | |
<p>| October       | Second Thursday of the Month | Regulatory submissions complete – Either IRB or QI documents submitted to Research Department and/or UNR IRB |</p>
<table>
<thead>
<tr>
<th>Month</th>
<th>Date/Time Frame</th>
<th>Event Description</th>
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</thead>
<tbody>
<tr>
<td>November</td>
<td>First Monday of the Month</td>
<td><strong>DRAFT of ASHP poster due to preceptor(s) and research pharmacist for review and comment.</strong> Once approved you may move ahead to printing of the poster, contact Frances Gonzalez for printing information.</td>
</tr>
<tr>
<td>December</td>
<td>Occurs the first or second week of the month</td>
<td><strong>Attend ASHP Midyear Clinical Meeting and Present Research Poster</strong></td>
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<td>Final weekday of the month</td>
<td><strong>All IRB and R&amp;D approvals or final authorized QI form (for non-research) should have been obtained at this point, copies of all approval letters are due to the research pharmacist.</strong></td>
</tr>
<tr>
<td>January</td>
<td>Third Monday of January</td>
<td><strong>Draft of Western States Conference Abstract due to preceptor(s) and research pharmacist for comment and review</strong></td>
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<td>See <a href="http://www.westernstates-rx.org/">http://www.westernstates-rx.org/</a> for information and regulations regarding abstract format and submission</td>
</tr>
<tr>
<td>February</td>
<td>Mid-February</td>
<td><strong>Register for Western States Conference</strong> (check <a href="http://www.westernstates-rx.org/">http://www.westernstates-rx.org/</a> for absolute deadline)</td>
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<td>End of Month</td>
<td><strong>Finish data collection for project</strong></td>
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<tr>
<td>March</td>
<td>By assigned date (see outlook calendar appointment)</td>
<td><strong>Finish draft of Western States Conference presentation and complete first presentation to preceptors and pharmacy staff</strong></td>
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<td>- Follow the required format as outlined on <a href="http://www.westernstates-rx.org/">http://www.westernstates-rx.org/</a></td>
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<td>- Bring 20 copies of your PowerPoint presentation to the meeting so that the attendees can write notes and give feedback</td>
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<td>- There will be a total of THREE presentations occurring March through May to allow for comments and polishing of your presentations. Your presentation dates will be scheduled via Outlook and will be by resident number (R1, R2…etc.).</td>
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<tr>
<td></td>
<td>By Third Thursday of the Month</td>
<td><strong>Email draft of Western States Conference handout to research pharmacist and preceptor(s) for review and comments</strong></td>
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<tr>
<td>April</td>
<td>As needed</td>
<td><strong>Continue data analysis and refinement of project presentation</strong></td>
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<td>Second Friday in April</td>
<td><strong>Submit journal choice and author guidelines for manuscript to preceptor(s) and research pharmacist via email</strong></td>
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<td>Start/continue work on draft of manuscript</td>
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<td>May</td>
<td>Dates vary, check website</td>
<td><strong>Attend Western States Conference and present project</strong></td>
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<tr>
<td></td>
<td>Last Friday in May</td>
<td><strong>Submit 2 research project ideas for next year’s residents (usually you will see some project presentations at the Western States Conference that might be beneficial if performed here)</strong></td>
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<td>Submit projects via V21PBMShare for new residents. Use the project proposal form and save to the submitted project ideas folder.</td>
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<td><strong>Submit project closure documents to research department</strong></td>
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<td>Note: this is only for research projects, no closure documentation is needed for non-research/QI projects</td>
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<tr>
<td>June</td>
<td>Early June – Date to be decided (watch for outlook email)</td>
<td><strong>Give Western States Conference project presentation at NVSHP (locally) meeting with Renown residents</strong></td>
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<td>Residency director will inform you of this date once it has been scheduled. This typically takes place during a weekday evening and is at a Renown Hospital auditorium.</td>
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<tr>
<td></td>
<td>Second Monday in June</td>
<td><strong>Project manuscript due to preceptor(s), residency director and research pharmacist</strong></td>
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Service and Policy Development
Updated 09/26/2018

**Brief Learning Experience Descriptor:**
The resident will gain exposure and contribute to the development and achievement of PBM and pharmacy service goals on the local, VISN, and National levels. This is an extended learning experience that begins after orientation and continues throughout the residency. The RPD will serve as the primary preceptor but the resident will have an opportunity to work with many Clinical Pharmacy Specialists, physicians, administrators and VISN leadership in achieving the outcomes associated with the projects of this learning experience. During this experience, residents will learn policy development abilities through the concepts of process management, resource provision, and product management. Communication and leadership skills will also be emphasized in order to facilitate effective policy and service development. Residents will be asked to identify needs within the VA (whether clinical, departmental, or organizational), perform data collection and an issue analysis, and draft a policy, procedure, or other solution that assists in rectifying these. Residents will work on updating current policies and procedures; assist in taking minutes or creating agendas for various taskforces and committees, and assist in working to maintain compliance with various regulatory bodies. Additionally, residents will assist in creating, maintaining, and prioritizing new services that will assist clinicians, administrators, and management in improving their service capabilities.

**Preceptors:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Mambourg, PharmD, BCPS, AAHIVP</td>
<td>VISN 21 Pharmacy Executive</td>
<td><a href="mailto:Scott.Mambourg@va.gov">Scott.Mambourg@va.gov</a></td>
<td>775-326-5724</td>
</tr>
<tr>
<td>Diana Higgins, Pharm.D.</td>
<td>VISN 21 Program Manager</td>
<td><a href="mailto:Diana.Higgins@va.gov">Diana.Higgins@va.gov</a></td>
<td>916-923-4532</td>
</tr>
</tbody>
</table>

**Goals and Associated Objectives to be formally taught and evaluated during this experience:**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
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</thead>
<tbody>
<tr>
<td><strong>Outcome R1:</strong> Demonstrate effective leadership and practice management skills in the areas of administration, analytics, informatics, and outcomes.</td>
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<tr>
<td><strong>Goal R1.2:</strong> Contribute to the leadership and management activities within the pharmacy outcomes and healthcare analytics field by exercising superior communication and political skills.</td>
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</tr>
<tr>
<td>OBJ R1.2.1 (Analysis) When confronted with a barrier to the accomplishment of a particular project, analyze the organizational environment, including its structure, network of resources, and politics, to determine a strategy for achieving success.</td>
<td>Explain the organization’s structure including the function of each of its departments and key individuals. Explain the importance of effective networking in removing barriers. Explain how to identify key stakeholders of a given project.</td>
</tr>
</tbody>
</table>
Explain the importance of persuasion as a skill of effective leaders.

Compare and contrast the types of persuasive arguments that are potentially effective.

Identify formal and informal medical staff leaders and how they can help achieve the desired goal.

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<th>Objective</th>
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<tbody>
<tr>
<td>OBJ R1.2.2</td>
<td>Explain formal and informal techniques for networking.</td>
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</table>

**Outcome R2: Manage and improve the medication-use process**

**Goal R2.1:**
Develop collaborative professional relationships with members of the PBM staff, various health care teams, taskforces, and workgroups.

**Objective** | **Related Activity/Instructional Objectives**
---|---
OBJ R2.1.1 | Explain the value of good peer relationships in the achievement of projects.
(Analysis) Use group participation skills when leading or working as a member of a formal or informal work group or taskforce to establish openly communicative and collaborative working relationships.

OBJ R2.1.2 | Accurately identify the primary theme or purpose of one’s written, oral, or virtual communication.
(Analysis) Determine the appropriate type of communication, and the medium and organization for it, using an understanding of the target audience, the characteristics of the information to be communicated, effectiveness, efficiency, customary practice and the recipient’s preferences.

Accurately determine what information will provide credible background to support or justify the primary theme of one’s communication.

Logically sequence ideas in written and oral communication.

Accurately determine the depth of communication appropriate to one's audience.

Accurately determine words and terms that are appropriate to one's audience.

Accurately determine one's audience's needs.

Accurately identify the length of communication that is appropriate to the situation.

**Participate in VISN Formulary Leader calls and agenda**

**Accurately identify the length of communication that is appropriate to the situation.**
Explain techniques for persuasive communication.

Explain the value of consulting with administrators and key decision-makers when choosing route(s) for communication of information.

Explain issues, including confidentiality, surrounding the choice of media to communicate information.

Explain the differences in language (e.g., jargon, acronyms) used to communicate among the various disciplines involved in pharmacy outcomes and healthcare analytics.

Explain the importance of adjusting one’s communications for the specific category of health professional (e.g., nurses, physicians, etc.).

Goal R2.2:
Lead departmental and/or interdisciplinary teams in the design, implementation, and/or enhancement of the organization’s criteria for medication use, monitoring, and outcomes measurement.

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<tr>
<th>Objective</th>
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</thead>
<tbody>
<tr>
<td>OBJ R2.2.1 (Synthesis) Collaborate with an interdisciplinary team to write or revise an existing guideline, measure/metric, policy, or protocol.</td>
<td>Appraise current policies and procedures for congruence with the organization’s mission, goals, and needs. Minutes and agenda development for PBM Workgroup, MUM Team, Task Forces and CPC</td>
</tr>
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</table>

Goal R2.4:
Assure that all patient-specific, medication-specific, and evidence-based pharmacotherapy information required to support effective medication-related decisions is readily available in a useful format to members of interdisciplinary, patient-centered teams.

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<tr>
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</thead>
<tbody>
<tr>
<td>OBJ 2.4.1 (Synthesis) Effectively present the benefits of functionally integrated evidence-based and other knowledge resources, analysis tools, and medication information systems.</td>
<td>Demonstrate utilization of analysis tools to members of interdisciplinary teams who will be using them in their daily practice.</td>
</tr>
</tbody>
</table>

Outcome R3: Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.

Goal R3.1:
Establiish oneself as an expert for data retrieval, medication information, and outcomes-related resources within the organization.

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<tbody>
<tr>
<td>OBJ R3.1.1 (Synthesis) Implement a successful strategy for earning credibility within the organization to be an authoritative expert on the creation of analytic tools, measurement of outcomes, and overall evidence-based medication-related care of patients.</td>
<td>Identify opportunities for the pharmacy outcomes and healthcare analytic specialist to earn credibility with members of the various interdisciplinary taskforces. Identify opportunities for the specialist to earn credibility within the PBM and various providers within the organization.</td>
</tr>
<tr>
<td>OBJ R3.1.2 (Synthesis) Fulfill requests for provider-requested data, reports, usage/cost information, or outcomes in an accurate and efficient manner.</td>
<td>Fulfill data requests for individuals and taskforces as appropriate as related to policy development.</td>
</tr>
</tbody>
</table>
OBJ R3.1.3  
(Comprehension) Answer questions and troubleshoot issues from users of the organization's analysis tools, criteria, cost, or policies and procedures.

Support and answer inquiries related to VISN and national policies and services as appropriate.

Goal R3.2:  
Contribute pharmacist perspective and expertise regarding the development, implementation, utilization, and revision of outcomes measures and metrics, and analysis tools in interactions with information technology staff, PBM staff, clinicians and end users.

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<tr>
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</table>
| OBJ R3.2.1  
(Application) Participate in the development of project timelines, financial projections, and outcomes measurement | Explain the potential contributions of the following to the achievement of a safe and effective system:  
1. Formulary systems  
2. Medication-use guidelines  
3. Medication-use restrictions  
4. Evidence-based protocols  
5. Care paths  
6. Disease state management  
7. Wellness management  
8. Provider education including academic detailing  
9. Patient Education  
10. Outcomes studies  
11. Benchmarking  
12. Medication distribution systems and control  
13. Analytics tools and software |
| OBJ R3.2.2  
(Synthesis) When presented with a non-standard problem, apply lateral (out-of-box) thinking to its solution | Understand different methods of approach when developing an policy. |

Goal R3.3:  
Critically evaluate and employ advanced analysis skills to relevant biomedical literature in preparing analysis tools, drug information responses, pharmacoeconomic proposals, and drug use criteria.

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</table>
| OBJ R3.3.1  
(Evaluation) Determine if the study design and methodology are appropriate to accomplish the objectives of a piece of biomedical literature. | Understand and differentiate between research methodology to determine appropriateness for a given study. |
| OBJ R3.3.2  
(Evaluation) Accurately interpret statistical information presented in a piece of biomedical literature. | Explain the application and interpretation of advanced statistical methods.  
Determine instances in which a study conclusion is erroneously supported by data display. |
| OBJ R3.3.3  
(Analysis) Identify potential sources of bias in a piece of biomedical literature. | Critically evaluate medical literature. |
| OBJ R3.3.4  
(Evaluation) Determine the internal and external validity of a piece of biomedical literature and if a study’s results have applicability for hypothesizing future research or for directing patient care decisions. | Evaluate the results and conclusions of medical literature to determine applicability to our VA population. |
<p>| OBJ R3.3.5 | Compare and contrast the reputations and peer-review procedures of biomedical journals. |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>OBJ R3.3.6 (Evaluation) When presented with conflicting biomedical literature, determine the validity and applicability for organizational need.</td>
<td>Perform a drug information inquiry as necessary to answer questions posed by a taskforce or workgroup.</td>
</tr>
<tr>
<td>OBJ R3.3.7 (Evaluation) When presented with limited evidence-based biomedical literature, synthesize a reasonable proposal for the specific information need in collaboration with members of relevant taskforces or workgroups.</td>
<td>Critically evaluate information and debrief after a visit from a pharmaceutical manufacturer representative.</td>
</tr>
<tr>
<td>OBJ R3.3.8 (Synthesis) Design tools and measures that perform patient-centered, evidenced-based monitoring for a therapeutic regimen or disease state that effectively evaluates achievement of the specified therapeutic goals.</td>
<td>Identify monitoring tools utilized and discuss monitoring parameters for the analyzed diseases and conditions. Identify customary monitoring parameters for medications commonly prescribed for diseases and conditions being analyzed.</td>
</tr>
<tr>
<td>OBJ R3.3.9 (Analysis) Appraise information provided by a pharmaceutical manufacturer.</td>
<td>Explain the principles and methodology of pharmacoeconomic analysis. Explain reliable sources of data.</td>
</tr>
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</table>

Goal R3.4: Identify opportunities for improving the safety of aspects of the organization’s medication-use system through analysis tools, measures, metrics, guidelines and policies.

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<tbody>
<tr>
<td>OBJ R3.4.1 (Application) Assist in the organization’s reporting and preventing medication errors and adverse drug reactions (ADEs) through development/maintenance of analysis tools, updating DUC, reporting alerts at meetings, or other means as necessary.</td>
<td>Update at least one DUC and present changes at the VISN PBM Meetings. Present safety updates at VISN PBM meetings. Determine if medication errors or safety updates necessitate a change in policy or tools used or developed by the VISN.</td>
</tr>
</tbody>
</table>

Goal R3.5: Assist the organization in achieving compliance with accreditation, legal, regulatory, and safety requirements related to the use of medications (e.g., Joint Commission requirements; ASHP standards, statements, and guidelines; state and federal laws regulating pharmacy practice; OSHA regulations).

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</thead>
<tbody>
<tr>
<td>OBJ R3.5.1 (Evaluation) Determine appropriate activities and documentation needed to meet accreditation, legal, regulatory, and safety requirements for pharmacy.</td>
<td>Explain the influence of accreditation, legal, regulatory, and safety requirements on clinical practice.</td>
</tr>
</tbody>
</table>

Outcome R4: Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.

Goal R4.1: Provide effective education and training on pharmacoeconomic proposals, analysis tools/software utilization, academic detailing goals, or general drug therapy topics to health care professionals and health care professionals in training.

<table>
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<tbody>
<tr>
<td>OBJ R4.1.1 (Application) Use effective educational techniques in the design of all educational activities.</td>
<td>Identify emerging issues in securing and integrating evidence-based information suitable for educational sessions.</td>
</tr>
</tbody>
</table>
Identify changes in medication-use or newly developed analysis tools that require training of staff within the organization.

Explain the differences in effective educational strategies when teaching colleagues versus residents versus students versus health professionals in other disciplines.

Design instruction that meets the individual learner’s needs.

Explain how different instructional delivery systems (e.g., demonstration, written materials, web-based) foster different types of learning.

Design instruction that employs strategies, methods, and techniques congruent with the objectives for an education or training program.

### OBJ R4.1.2
(Application) Use advanced public speaking skills to communicate effectively in large and small group situations.

- Explain techniques that can be used to enhance audience interest.
- Explain techniques that can be used to enhance audience understanding.
- Explain speaker habits that distract the audience.
- Explain the importance of developing excellence in public speaking for fulfillment of the role as a pharmacoeconomic pharmacist or data manager/analyst.
- Explain a systematic method for ongoing improvement in one’s own public speaking skills.

**Goal R4.3:**
Design and present Academic Detailing education programs to healthcare providers and patients in order to improve patient outcomes.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJ R4.3.1</td>
<td>Explain appropriate medication-related educational topics for health care support groups.</td>
</tr>
<tr>
<td>OBJ R4.3.1</td>
<td>Explain appropriate medication-related educational topics for the general public.</td>
</tr>
<tr>
<td>OBJ R4.3.2</td>
<td>Explain how to use analysis tools via virtual training sessions.</td>
</tr>
<tr>
<td>OBJ R4.3.2</td>
<td>Explain how available analysis tools can assist academic detailers</td>
</tr>
<tr>
<td>OBJ R4.3.2</td>
<td>Participate in Academic Detailing meetings and initiatives</td>
</tr>
</tbody>
</table>

**Schedule:**
Longitudinal Learning Experience
- Assignments made on a weekly basis by preceptor and by appointment
- This learning experience begins after orientation and continues all year

**Designated Meetings/Responsibilities (please list for resident when they occur, what time, and when):**
- Executive Leadership Forum (*Every Thursday*)
• Workload Capture Workgroup (2nd Monday/month)
• National Clinical Pharmacy Advisory Group Call (Biweekly, Thursday)
• VISN 21 Clinical Pharmacy Practice Council (3rd Friday/Month)
• National Clinical Pharmacy Call – Forecasting (3rd Wednesday/Month)
• VISN 21 Residency Program Directors Committee (4th Thursday/Month)
• VPE VACO Monthly Call (4th Monday/Month)
• Health Care Delivery Board (2nd Tuesday/3 Months)
• PBM Staff Meetings (Fridays 09:00am to 10:30am)
• Resident Leadership Conference (Every 2nd Wed and 4th Friday at 3:30pm)
• VISN PBM Workgroup (4th Friday/month)
• Clinical Practice Council (2nd Thursday every other month)
• NTL VISP Formulary Leader Meeting (2nd Monday/month)
• Executive Leadership Meetings (Every other month as assigned)
• Reno P&T Meetings (4th Wednesday/month)
• One local or state meeting and one national professional meeting (must be pharmacy-related)
  o Attend ASHP Midyear Meeting and residency booth recruitment (December)
  o Attend Nevada State Board of Pharmacy meetings held in Northern Nevada (Reno)
  o Attend Nevada Board of Pharmacy Meeting(s)
• Community Service Activity
• Health plan/facilitate Pharmacy Week (Usually 3rd week in October)
• NVSP involvement (Annual meeting, if applicable)
• Taskforce Meetings (As assigned)
• Institutional Review Board (IRB) meetings (Optional)
• Regulatory Preparation meetings (e.g. Joint Commission, ASHP, etc.) – (Optional)

The resident may be excused from some of these programs with permission from the residency director if they conflict with scheduled patient care activities or other projects.

Checklist of assignments/projects/requirements that must be complete to successfully pass the learning experience (please list deadlines if there are any):
• PBM Advisory Meeting Planning and development
• Consult, Guideline, Clinical reminder development
• Resident Evaluation Material
• Policy and Criteria Development and Review
• Update VISN documents
• Participate in a medication safety trending and analysis, root cause analysis (RCA), or failure mode effects analysis (FMEA) or other related medication safety functions (e.g. adverse drug reaction (ADR) reporting, medication error or safety event reporting and analysis)

Assigned Readings/Discussion topics:
1. Guidelines and Policies
2. All agenda items and background materials
3. ACUPA Policy Development Process
Example Elective Experience: Database Management
Updated 09/26/2018

Brief Learning Experience Descriptor:
This rotation is designed to give the resident exposure to an advanced area of informatics and database management. This experience will cover the fundamentals of database architecture, database management systems, database systems, and cube design. Principles and methodologies of database design and techniques/best practices for database application development will be covered as well.

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
<th>Phone</th>
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</thead>
<tbody>
<tr>
<td>Joy Meier, Pharm.D., BCACP, PA</td>
<td>VISN 21 PBM Data Mart Manager</td>
<td><a href="mailto:Joy.Meier@va.gov">Joy.Meier@va.gov</a></td>
<td>925-372-2381</td>
</tr>
<tr>
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<td>VISN 21 PBM Data Mart Manager</td>
<td><a href="mailto:Janice.Taylor5@va.gov">Janice.Taylor5@va.gov</a></td>
<td>775-326-5727</td>
</tr>
<tr>
<td>Jennifer Kryskalla-Marin, Pharm.D, BCPS</td>
<td>VISN 21 PBM Data Manager</td>
<td><a href="mailto:Jennifer.Kryskalla@va.gov">Jennifer.Kryskalla@va.gov</a></td>
<td>562-340-1863</td>
</tr>
<tr>
<td>Amy Robinson, Pharm.D.</td>
<td>VISN 21 PBM Data Manager</td>
<td><a href="mailto:Amy.Robinson8@va.gov">Amy.Robinson8@va.gov</a></td>
<td>650-336-4619</td>
</tr>
</tbody>
</table>

Goals and Associated Objectives to be taught and evaluated during this experience:

**Outcome E1:** Demonstrate advanced skills in working with a specific technology or automation product (such as Cube Building, Clinical Reminders, etc.).

**Goal E1.1:** Serve as an expert resource for the management of a specific technology or system.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
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</thead>
<tbody>
<tr>
<td>OBJ E1.1.1 (Synthesis)</td>
<td>Explain the differences in communicating with a technical audience versus a non-technical audience.</td>
</tr>
<tr>
<td>OBJ E1.1.2 (Application)</td>
<td>Explain the user view of the technology or automation system.</td>
</tr>
<tr>
<td></td>
<td>Explain the technical view of the technology or automation system.</td>
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</tbody>
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**Outcome E2:** Utilize added knowledge and skills to enable the application of contemporary quality methodology to the management of pharmacy services.

**Goal E2.1:** Participate in clinical and economic outcomes analyses.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Related Activity/Instructional Objectives</th>
</tr>
</thead>
</table>

97
<table>
<thead>
<tr>
<th>OBJ E2.1.1</th>
<th>Explain the principles and methodology of basic pharmacoeconomic analyses.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Explain study designs appropriate for a prospective clinical, humanistic, and economic outcomes analysis.</td>
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<tr>
<td></td>
<td>Explain the technique and application of modeling.</td>
</tr>
<tr>
<td></td>
<td>Explain the types of data that must be collected in a prospective clinical, humanistic and economic outcomes analysis.</td>
</tr>
<tr>
<td></td>
<td>Explain methods for analyzing data in a prospective clinical, humanistic and economic outcomes analysis.</td>
</tr>
<tr>
<td>OBJ E2.1.2</td>
<td>Explain the purpose of a retrospective clinical, humanistic or economic outcomes analysis.</td>
</tr>
<tr>
<td>(Comprehension) Explain the principles and methodology of retrospective clinical, humanistic, and economic outcomes analysis.</td>
<td>Explain study designs appropriate for a retrospective clinical, humanistic and economic outcomes analysis.</td>
</tr>
<tr>
<td></td>
<td>Explain the types of data that must be collected in a retrospective clinical, humanistic and economic outcomes analysis.</td>
</tr>
<tr>
<td></td>
<td>Explain the content and utilization of reports and audits produced by the pharmacy department.</td>
</tr>
<tr>
<td></td>
<td>Explain possible reliable sources of data for a retrospective clinical, humanistic and economic outcomes analysis.</td>
</tr>
<tr>
<td></td>
<td>Explain methods for analyzing data in a retrospective clinical, humanistic and economic outcomes analysis.</td>
</tr>
<tr>
<td></td>
<td>Explain the impact of limitations of retrospective data on the interpretation of results.</td>
</tr>
<tr>
<td></td>
<td>Explain how results of a retrospective clinical, humanistic and economic outcomes analysis can be applied to internal business decisions and modifications to a customer's formulary or benefit design.</td>
</tr>
<tr>
<td>OBJ E2.1.3:</td>
<td>(Evaluation) Contribute to a retrospective clinical or economic outcomes analysis.</td>
</tr>
</tbody>
</table>

**Schedule:**

Extended Learning Experience
- Assignments made on a weekly basis by preceptor and by appointment

**Designated Meetings/Responsibilities (please list for resident when they occur, what time, and when):**
- Daily/weekly meetings with preceptor as assigned
- Daily/weekly demonstrations/lectures with preceptor as assigned
- Projects/assignments as assigned by preceptor
Checklist of assignments/projects/requirements that must be complete to successfully pass the learning experience (please list deadlines if there are any):

- To be determined by preceptor at the beginning of the learning experience and adjusted throughout

**Assigned Readings/Discussion topics:**

1. Database Theory Documents
2. SQL Server Analysis Services Documents
3. SQL Server Integration Services Documents
Evaluations
PGY-2 Pharmacy Outcomes and Healthcare Analytics
Residency Evaluation Process

Beginning in 2006 ASHP made available an on-line evaluation process called PharmAcademic which is used fully by this program. **Before the program begins**, each resident completes an initial self-evaluation (**Appendix VII**). This allows the RPD and Residency Board to tailor the residency experience to the individual resident’s desires, needs, and experiences. Each resident’s individualized residency training program and evaluation process is entered into a security protected on-line computerized program. The residency director has entered all documents and determined time frames for scheduled rotations, appropriate preceptors and evaluation documents. Descriptions of each rotation experience are available which include: a brief descriptor, goals and associated objective to be formally taught and evaluated during this experience, learning activities to facilitate achievement of the goals and objectives, schedule, designated meetings/responsibilities, checklist of assignments/projects/requirements and assigned readings.

Residents are assigned to preceptors for training and guidance. Preceptors will meet with the resident on a regular basis and review the resident’s accomplishments. **Midway through a rotation** the preceptor will determine if the resident is likely to meet all goals and objectives of the rotation. If the resident has not met the goals and objectives necessary to pass the rotation, the preceptor will discuss this with the resident so corrective actions can be taken. If the resident does not meet these goals and objectives by the end of the rotation, the board will discuss and plan the course of action at that time. **During the rotation** formative evaluation will be given by the preceptor as projects are completed. **Formative evaluations** occur as daily feedback: verbal or written. Examples of written evaluation can be signing progress notes and addendums, journal club or presentation evaluations, corrected minutes and agendas etc.

**Summative evaluations** occur at the end of each Learning Experience if 6 weeks or shorter or quarterly for those that are longitudinal experiences. **At the conclusion of each rotation**, required evaluations will be completed in PharmAcademic. These include a summative self-evaluation, and preceptor evaluation. Preceptors will also perform a summative evaluation at the end of the rotation. The evaluations for rotations are performed online, on the PharmAcademic website (https://www.pharmacademic.com/). After the preceptor enters and signs a summative evaluation, an alert will be sent to the resident via Outlook e-mail. The resident will then need to sign off on the evaluation. Also, the resident will enter a summative self-evaluation and a preceptor evaluation. After completion, these will be sent back to the preceptor to sign. If the preceptor has questions or comments about the evaluations, they may send it back to the resident for review or edits, or they may sign it if it is complete.

**Each resident is asked to give an honest appraisal of the preceptor and the rotation.** Once the preceptor and the resident have completed evaluations they will be discussed. After discussion the preceptor and resident will sign the evaluation which will then be sent to the Residency Board and the Program Director. Evaluations will be reviewed and deficiencies and/or disciplinary actions that are needed will be addressed by the Residency Board. These are then signed by the Residency Director and filed.
In addition, at the end of each quarter the resident’s entire program evaluation is done by the Residency Director with input from the Residency Board. A review and discussion between the resident and Residency Director is documented and an individualized plan is developed to accommodate changes in the resident’s learning experience based on their or the preceptors requests. Once goals for the program are achieved they need not be evaluated again. If satisfactory progress is made the goals continue to be evaluated.

Quarterly evaluations are done by the Residency Board and are presented to the resident. The evaluation involves identifying any objective evaluated that has been rated as “Needs Improvement”. Specific suggestions for improvement are made. In addition, strengths and areas of improvement are identified and the residency experience is tailored to the resident’s needs. The resident is also asked to complete a quarterly self-assessment (Appendix VIII) similar in nature to the initial assessment to assist in this individualization. A quarterly self-evaluation is an important component of the residency program. These will be completed in October, January, April, and June. The evaluation should be introspective of where the resident feels he/she is progressing. The self-evaluation should be related to the initial plan that was submitted in June. These evaluations will be reviewed by the Residency Board members. Changes in experiences may be recommended by the Advisory Board to help residents attain the goals. In addition, the residents will self-evaluate the same goals and objectives that the preceptor is evaluating at the end of the Learning Experience. The preceptors will also self-evaluate their teaching skills.

At the end of the residency year, residents will be asked to complete a final self-evaluation as well as an evaluation of the program and overall residency experience. This will take place through the completion of two forms – a final quarterly self-evaluation and an outgoing resident survey (Appendix IX). The resident will also receive a final evaluation by the Residency Board that will be presented to the resident in a format similar to the above quarterly evaluations.

Meaning of Objective Ratings

**Achieved**
You have fully accomplished the educational goal for this particular learning experience. No further instruction or evaluation is required.

**Achieved for Residency**
This is reserved for the Residency Board to decide and is generally left until the end of residency as it makes the Goal/Objective optional for future evaluation in other learning experiences. As the Residency Board intends many of these to be evaluated multiple times in residency, they will make the decision on marking achieved for residency.

**Satisfactory Progress**
This applies to an educational goal whose achievement requires skill development in more than one learning experience. The learning experience being evaluated is not the last one in which this goal will be taught. In this current experience you have progressed at the required rate to attain full achievement by the end of the program.

**Needs Improvement**
Your level of skill on the educational goal does not meet the preceptor's standards of either "Achieved" or Satisfactory Progress," whichever applies.

Objectives Rated as “Needs Improvement” and Remediation

Needs Improvement on On Demand or Formative Evaluation
Preceptors are encouraged to provide verbal feedback during the rotation in addition to written feedback in PharmAcademic. If the preceptor has provided initial verbal feedback and the resident is not meeting “satisfactory progress” for a specific goal or objective, the preceptor should document an On Demand evaluation as soon as possible and discuss with the resident. Especially for longitudinal rotations in which evaluations are scheduled quarterly, waiting until the scheduled formative evaluation will result in a delay and frustration for both the resident and preceptor. On Demand or formative (mid-point) evaluations that include a “needs improvement” must include a documented action plan in PharmAcademic that will target “satisfactory progress” by the end of the learning experience. The preceptor will notify the RPD regarding the evaluation and action plan. If needed, the preceptor and RPD will meet to discuss further actions.

Needs Improvement on Less than Two Summative Evaluations
If a preceptor determines that a resident still needs improvement for selected goals and objectives by the end of the rotation, the preceptor will meet with the RPD PRIOR to the end of the rotation and PRIOR to meeting with the resident. The preceptor and RPD will determine how the objective will be addressed on future rotations and will decide if a warm-hand off is needed between the current and upcoming preceptor. The RPD will determine if any modifications are necessary to future rotations to ensure satisfactory progress. The current preceptor will meet with the resident to provide the summative evaluation.

Needs Improvement for Same Objective on More than Two Summative Evaluations
If a resident receives “needs improvement” for the same objective on more than one summative evaluation, a formal remediation process will be implemented to assist the resident in addressing the areas needing improvement. The RPD will meet with the preceptors and resident to discuss the evaluations. Based on this discussion, the RPD and resident will develop and document an action plan in PharmAcademic. Example items in the action plan include goal-setting, additional assignments, timelines, and frequent follow up meetings. The RPD will determine if any modifications are necessary to future rotations to ensure satisfactory progress. Modifications may include extending or repeating specific learning experiences and elimination of elective learning experiences to provide additional time for remediation.

Needs Improvement on More than 3% of Required Objectives
If at each quarterly meeting, a resident has received “needs improvement” for more than 3% of required program objectives on summative evaluations, a formal remediation process will be implemented to assist the resident in addressing the areas needing improvement. The RPD will meet with the preceptors and resident to discuss the evaluations. Based on this discussion, the
RPD and resident will develop and document an action plan in PharmAcademic. Example items in the action plan include goal-setting, additional assignments, timelines, and frequent follow up meetings. The RPD will determine if any modifications are necessary to future rotations to ensure satisfactory progress. Modifications may include extending or repeating specific learning experiences and elimination of elective learning experiences to provide additional time for remediation. If the resident still receives “needs improvement” for more than 3% of required program objectives on summative evaluations after completion of a formal remediation process, or if the resident is unable to complete the remediation process, the RPD may recommend termination from the program.

**PharmAcademic Evaluation Forms:**
See also https://www.pharmacademic.com/
APPENDICES

I. Early Commitment Policy
II. Application and Evaluation Procedure
III. Continuous Quality Improvement (CQI)
IV. Extended Leave of Absence Policy
V. Outcomes, Goals, & Objectives
VI. Journal Club/Literature Evaluation
VII. Initial Self-Evaluation
VIII. Quarterly Self-Evaluation
IX. Outgoing Resident Survey
X. Functional Statement
XI. National Formulary FAQ
XII. Important Web Sites Used By Past Residents
XIII. OAA Mandatory Training Orientation
XIV. Scope of Practice
XV. Certificate Requirements Contract
XVI. Information for Transferring NT Login
APPENDIX I: Early Commitment Policy

VA Sierra Pacific Network (VISN 21)
Early Commitment Policy
January 2014

1. PURPOSE: To establish policy and procedures for early commitment to the postgraduate year 2 (PGY2) residency program in Psychiatric Pharmacy in advance of the matching process for VA Sierra Nevada Health Care System (VASNHCS), Pharmacy Service.

2. POLICY: VASNHCS may promote current VA postgraduate year 1 (PGY1) residents into a PGY2 residency in Psychiatric Pharmacy when general qualifications and selection criteria are met:
   A. The PGY2 program and position are registered with the National Matching Service (NMS).
   B. The PGY1 resident does not have to be registered for the Match (https://natmatch.com/ashprmp/) if accepting an early commitment to the PGY2 program.
   C. The resident applicant must be a current PGY1 resident in a PGY1 VASNHCS residency program.
   D. The PGY1 and PGY2 residencies must be continuous years of employment for the resident.
   E. The PGY1 resident and PGY2 residency program director (RPD) must both sign a letter of agreement that commits the PGY2 position to the PGY1 resident. The letter of agreement is available at https://natmatch.com/ashprmp/aboutecp.html.
   F. The PGY2 residency program will pay a fee of $125 to the NMS for each position committed to the Early Commitment Process.
   G. The letter of agreement signed by both parties and the fee must be received at NMS by the December deadline in the year before the residency begins.

3. RESPONSIBILITY:
   A. The PGY2 residency program will be responsible for:
      1. Registering the PGY2 program and position with the NMS prior to promoting or recruiting for the PGY2 program.
      2. Recruit PGY1 residents
   B. Resident Applicant:
      1. Must have satisfactory PGY1 evaluations
      2. Must be making progress sufficient to successfully complete PGY1 goals and objectives by June 30th of next year
      3. Demonstrate interest and motivation to do a Specialty Residency
      4. Prepare and delivery of a formal letter of interest to be considered for a PGY2 resident position.
      5. Adherence to all applicable deadlines listed above.
         (a) Return of signed offer letter is a formal written commitment by resident to the PGY2 program.
   C. Program Director:
      1. Approve or deny early commitment.
      2. Prepare and deliver a formal offer letter for the PGY2 resident position.
      3. Adherence to all applicable deadlines listed above.
      4. Participation in ASHP PGY2 residency matching program according to all ASHP established guidelines and regulations.

4. PROCEDURE:
   A. The PGY1 resident will submit of a letter of interest or participate in an interview with the PGY2 residency program director.
   B. The letter/interview of interest must meet the following criteria:
      1. Describe what the PGY1 resident would like to accomplish through the PGY2 residency
      2. Be delivered to the PGY2 residency program director and Director of the PGY1 residency by the first Friday in December at the latest (though preferred earlier).
C. If there are more than one PGY1 residents applying for one PGY2 position, the offering of the PGY2 position will be based on performance in the PGY1 position, formative evaluations, summative evaluations, and interview evaluations by the Resident Advisory Board (RAB) members.

D. Letters offering positions to selected applicants must be delivered in hardcopy format no later than the date of Early Commitment.

E. The signed offer letter must be returned to the PGY2 program director and copies given to the PGY1 program director.

5. APPEALS AND EXCEPTIONS TO THE POLICY:
   A. No changes, modifications or exceptions to the policy will be honored without approval of the RAB.
   B. All appeals must be submitted to the RAB in writing.
APPENDIX II: Application and Evaluation Procedure
PGY1 and Post PGY2 Residency Program
VA Sierra Pacific Network (VISN 21)
February 2016

1. PURPOSE: The Veterans Affairs Sierra Nevada Healthcare System (VASNHCS) Pharmacy Service and VA Sierra Pacific Network are committed to providing a high-quality experience for PGY1 and PGY2 Pharmacy Residents. In order for the Service, providers, patients and staff to benefit from the residency programs, it is important to identify qualified pharmacists committed to attaining professional competence beyond entry-level practice. The following outlines the procedure involved with evaluating applications, inviting applicants for interviews, post-interview assessment and ranking for match, as well as post-match procedures for unmatched positions.

2. POLICY: The Residency Program Directors, Residency Board, and Pharmacy Staff will adhere to this policy when receiving, assessing, and ranking resident applications to ensure there is a criteria-based processes to evaluate and rank program applicants.

3. DEFINITIONS:
   a. PGY1 Resident: Post graduate year 1 resident
   b. PGY2 Resident: Post graduate year 2 resident
   c. Residency Program Director (RPD): Person responsible for directing residency learning and to ensure ASHP accreditation standards are met
   d. Residency Board: Committee made up of the RPD and PGY1 and PGY2 Preceptors representative of clinical pharmacy areas
   e. ASHP: American Society of Heath System Pharmacists

4. RESPONSIBILITY:
   a. Application Process:
      (1) We will participate in the suggested WebAdMIT portal of the pharmacy online residency centralized application service (PhORCAS) for receiving applications and enforcing deadlines. All ASHP regulations regarding resident application will be followed.
      (2) Application Development: Application materials are developed by the Residency Program Directors (RPDs) and may be reviewed and approved by the Residency Board. These materials include: Eligibility Requirements, Recruitment brochure/flyer, Recruitment Letter, and Applications.
      (3) Applicant Deadline: The deadline is determined annually by the RPDs (generally early to mid-January).
      (4) Handling of Application Materials: Candidates wishing to apply to the program are required to submit the following:
         (a) A “letter of intent” stating why they are pursuing a residency position in our program. This should be a maximum of 1 typed page.
         (b) A current curriculum vitae.
         (c) A current official University/College Pharmacy School transcript.
         (d) Three letters of recommendation. These should be from individuals capable of commenting on the applicant’s professional capabilities, including: academic ability, communication skills, behavioral attributes (leadership, initiative, dependability, ability to handle multiple tasks, etc.), clinical problem solving skills, an assessment of potential capability to perform research, and any other attributes which will assist us in assessing their ability to flourish and succeed in our program. All comments and information will be held in strictest confidence.
         (e) All application materials are maintained in WebAdMIT or the recommended online application program. Application materials received after the deadline will NOT be accepted.
         (f) After selection is made, the candidates will be required to submit the US Government form VA Form 10-2850D “Application for Health Professions Trainees” AND form OF-306 “Declaration for Federal Employment”. These forms are available at http://www.opm.gov/forms/html/of.htm.
      (5) Evaluating Applications:
         (a) Application Review Sheet: The RPDs and Residency Board will track incoming documents with the Application Review Sheet (Attachment A). Completed applications will be ranked using Attachment A and the related rubric and a determination will be made whether or not to offer an interview. A “completed” application is defined as containing all required materials.
5. **PROCEDURES:**

a. **Interview Process**

1. Invitation for Interviews: The RPD and available Residency Board members will complete the scoring section of the Application Review Sheet (Attachment A) for all completed applications. Applications will be ranked in order of Application Review Sheet score (average score if more than one Application Review Sheet is available for an applicant). Invitation letters for interviews will be sent in order of highest to lowest score. Once all interview appointments are filled or if the Board determines that a candidate has scored too low for being offered an interview, they will be alerted to this effect by an email or letter (Attachment B) prior to the interview notification date.

2. Structure of Interview: The PGY1 and PGY2 Residency Program interview includes a meeting with the RPD, Pharmacy Administration, and an interview panels consisting of Preceptors/Clinical Pharmacy Specialists/Current PGY1 and PGY2 Residents, as appropriate.

3. Program Review: The RPD meets with the scheduled applicants to discuss the setting, Pharmacy Service, Residency Program, benefits offered to residents and background/ qualifications of the RPD. This is also the component of the interview process that allows the applicant the opportunity to have their questions about the residency program answered by the RPD.

4. Panel Interview: The residency program utilizes a panel interview format to optimize the number of preceptors exposed to applicants, and allow for the broadest input into the selection process of the residency.

5. Interviewers: Because residents spend a majority of their time interacting with either the clinical or the administrative aspects of the Pharmacy Service, these areas are represented on the interview panels. Volunteers are solicited and scheduled by the RPD. The panels are made up of preceptors appropriate to the areas of service that pharmacy provides. (e.g., Clinical Pharmacy Specialist, Clinical Pharmacists, Inpatient Supervisor, Outpatient Supervisor, Chief of Pharmacy, VISN 21 PBM Manager), and current PGY1 and/or PGY2 Residents.

6. Development of Interview Questions: The Residency Committee utilizes the VA’s Performance-Based Interviewing technique (see: http://vaww.palo-alto.med.va.gov/education/HPDM/intv_intro.html). After determining key knowledge, skills, abilities, attitudes and experiences, reviewing recent resident exit interviews, and reflecting on recent and current resident classes, the Residency Board develops a set of interview questions that asks applicants about specific examples in their past work or life experiences that relate to the key knowledge, skills, abilities, attitudes and experiences needed for success in the residency. Some examples of past questions may be found on Attachment C.

7. Evaluation of Interview Answers: Immediately after the applicant interview, interview panel members individually complete the Pharmacy Residency Program Interview Evaluation Form (Attachment D). Completed forms are turned into the RPD, who collates all the data into a spreadsheet for candidate comparison and files the forms in the applicant’s application folder.

8. Reference Check: If there are wide differences in opinion between Committee members regarding an applicants’ rank or if Committee members request more information regarding applicants, a reference check will be used to gain more insight into an applicant’s previous performance. Applicant’s references or past preceptors as identified by the applicant’s curriculum vitae may be contacted by telephone by either a committee member or the RPD, and interviewed using the Reference Check form (Attachment E).

9. Tour:
   - (a) Applicants are given a tour of the VASNHCS facilities to give them an introduction to the physical setting of the residency.
   - (b) Current PGY1 and/or PGY2 residents serve as tour guides. This allows applicants the opportunity to ask questions to a current resident regarding their impressions of the program, away from the RPD and preceptors.

   It also allows the resident to evaluate the applicant away from the structured interview panel setting.

10. Ranking Process: The PGY1 and PGY2 Residency Programs comply with all ASHP Resident Matching Program rules and policies, as set forth by ASHP and National Matching Services, Inc. (NMS).

11. Final Ranking Meeting: All data is collected, charted, and graphed for comparison reasons. Individual assessment scores, section scores, and total interview scores are listed in applicant tables with interviewer comments are noted at the bottom. Additionally, total interview scores are graphed against other applicants for comparison reasons. This information is utilized by the interview panel members to make a final rank list.

12. Submission of Rank List: The VASNHCS PGY1 and PGY2 Residency Program Rank Order Lists are submitted to NMS by the RPD via prescribed methods, before the deadline set by NMS.
b. Post-Rank Process

(1) Matched Positions:
   (a) Once match results are available, the RPD will notify the Chief of Pharmacy or VISN 21 Leaders of the results, and contact matched residents by telephone or email. The RPD will also send a group email to all matched residents introducing them to each other.

(2) Commitment Letter
   (a) A Resident Appointment letter (Attachment F) is sent to each matched resident, postmarked no later than 30 days following receipt of the Match results. The matched resident is asked to acknowledge receipt of the Resident Appointment letter by sending back a signed copy of the letter to the RPD within two weeks of the date of the letter.

(3) In the event that phase I match does not fill all PGY-1 or PGY-2 positions, we will follow ASHP guidance regarding the Phase II match. https://www.natmatch.com/ashprmp/aboutdates.html

c. Unmatched Positions from Phase I and Phase II match:

(1) Applicant Search and Recruitment
   (a) In the event that both Phase I and Phase II match do not fill all PGY1 or PGY2 positions, the RPD will notify the Chief of Pharmacy or VISN 21 Leaders. Applicants interviewed with VA SNHCS or VA Sierra Pacific Network, on the Rank Order List, and identified as unmatched applicants by the unmatched applicant listing from ASHP and NMS may be called by the RPD and offered a position in order of the Rank Order List. 
   (b) If no applicants listed on the Rank Order List are available, a formal search will be opened by the RPD. Applicants will be identified via the unmatched applicant listing from ASHP and NMS, emails to local Schools of Pharmacy, national VA listservs (e.g., VHA Clinical Pharmacy, Pharmacy Chiefs, Clinical Coordinators), or other means. The process for resident ranking and selection will be similar to that outlined for match phase I and II.

(2) Interview Process
   (a) The interview process will utilize the same materials and processes as outlined above. If no suitable applicant can be found the VA National Director of Pharmacy Residency Programs will be contacted for further direction.

(3) Ranking Process
   (a) The Residency Committee will utilize the same materials and processes as outlined above to rank applicants. Once applicants are ranked by the Residency Committee and approved by the RPD, the applicant will be contacted by telephone. Ranked candidates will be given 48 hours to decide if they want to accept the position. If they decline the position or if the offer expires (e.g., no contact with the RPD in 48 hours), the next ranked candidate will be called. This will continue through all ranked candidates until a candidate verbally accepts the position, or all ranked candidates have been contacted and no candidate accepts the position.
   (b) Applicants not ranked will be sent a letter (Attachment B) notifying them that they will not be offered the residency position.

(4) Appointment Letter
   (a) A Resident Appointment letter (Attachment F) is sent to applicants that have verbally accepted the offer for a residency position. The resident is asked to acknowledge receipt of the Resident Appointment letter by sending back a signed copy of the letter to the RPD within two weeks of the date of the letter.

(5) Unfilled Positions
   (a) The Chief of Pharmacy or VISN 21 Leaders will be notified by the RPD if any resident positions are not filled. VA Central Office (VACO) will be notified and the unfilled position will be returned to VACO for redistribution per VA policy.

6. REFERENCES: None.

7. ATTACHMENTS:
   a. Attachment A – Application Review Sheet
   b. Attachment B – PGY1 and PGY2 Regret Letters
   c. Attachment C – Example Questions
   d. Attachment D – Resident Applicant Assessment Form
   e. Attachment E – Reference Check Form
   f. Attachment F – Appointment and Offer Letters for PGY1 and PGY2
8. **RECISSION:** Pharmacy In-service Policy 119-242, Post Graduate Year One (PGY1) and Postgraduate Year Two (PGY2) Residency Program Application and Ranking, dated February 2014.

9. **REVIEWED BY:** Beth Foster, R.Ph., Chief, Pharmacy Service

10. **POLICY CREATION DATE:** Unknown, original policy created prior to 2001.

Submitted by:

Scott E. Mambourg, Pharm.D.
Clinical Pharmacy Coordinator, Pharmacy Service

Jannet Carmichael, Pharm.D. BCPS, FCCP, FAPhA
PGY2 Residency Program Director VA Sierra Pacific Network

Heather Mooney, PharmD, BCPS, BCPP
PGY2 Residency Program Director, Psychiatric Pharmacy

Dawn Currie, PharmD, BCPS
PGY2 Residency Program Director, Geriatric Pharmacy

Approved by:

Beth Foster, R.Ph.
Chief, Pharmacy Service
# ATTACHMENT A
## APPLICATION REVIEW SHEET

Name: 

Pharmacy School and PGY1 residency (if applicable):

<table>
<thead>
<tr>
<th>Letter of intent</th>
<th>CV</th>
<th>Transcript</th>
<th>Letter of rec 1</th>
<th>Letter of rec 2</th>
<th>Letter of rec 3</th>
<th>US citizen</th>
<th>No Felony History</th>
<th>Veteran status</th>
<th>ASHP Match #</th>
</tr>
</thead>
</table>

50 points possible Total points: __________ (Include 2 points if Veteran status)

(10) **Letter of Intent:**

(4) General Information:
(3) Description of why candidate is ideal match for VASNHCS (what does candidate bring to program):
(3) Main Interests (Description of why VASNHCS is a good match for candidate):

(15) **CV:**

(3) Presentation (spelling/grammar/look):
(12) Content:
Professional experience (work, volunteerism, rotations) (3)
Teaching experience (3)
Leadership/Scholarship/Awards (3)
Publications/Research (3)

(10) **Transcript:**

(5) GPA: (5) Clerkship grades:
3.51-4.0 (5 pts), 3.01-3.5 (4 pts), 2.51-3.0 (3 pts), 2.0-2.5 (2 pts), under 2.0 (0 pts).
Pass/Fail ranking: Bottom - 0pts; 1-20% - 1pt; 21-40% - 2pts; 41-60% - 3pts; 61-80% - 4pts; 81%-top - 5pts

(15) **Letters of Recommendation (5 pts each):**

<table>
<thead>
<tr>
<th>Author</th>
<th>Pros</th>
<th>Cons</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Would you offer interview? [ ] Yes [ ] No

Comments:
January 28, 2013

Dear Resident Applicant:

Thank you for your interest in the Pharmacy Practice Residency at the VA Sierra Nevada Health Care System. We were very fortunate to receive an unexpected number of applications this year and therefore are unable to grant interviews to all applicants. Pre-screening of your application packet did not meet our entrance criteria for offering interviews this year, and we will be unable to offer you an interview.

Again, thank you for your interest in our program and best of luck in obtaining the residency best suited for your professional interests and goals.

Best Regards,

Scott E. Mambourg, Pharm.D., BCPS, AAHIVP
Scott E. Mambourg, Pharm.D., BCPS, AAHIVP
Clinical Coordinator
PGY1 Residency Program Director

Providing World Class Care and Service to America’s Heroes
January 28, 2013

Resident Address

Dear Dr.:

Thank you for your interest in the VA Sierra Pacific Network PGY 2 Pharmacy Residency program. We were very fortunate to receive an unexpected number of applications this year and therefore are unable to grant interviews to all applicants. Pre-screening of your application packet did not meet our entrance criteria for offering interviews this year, and we will be unable to offer you an interview.

Again, thank you for your interest in our program and best of luck in obtaining the residency best suited for your professional interests and goals.

Best Regards,

Jannet M. Carmichael, Pharm.D., BCPS, FCCP, FAPhA
VISN 21 Pharmacy Executive and
PGY2 Residency Director
VA Sierra Pacific Network

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ATTACHMENT C
INTERVIEW QUESTIONS

VA SIERRA PACIFIC NETWORK

Not included in this policy and vary from year-to-year. Typically consist of clinical questions, critical thinking questions, and questions that pertain to pharmaco economics and formulary management/managed care.
ATTACHMENT D
RESIDENT APPLICANT ASSESSMENT FORM

Applicant Name: ___________________________ Date: ____________

<table>
<thead>
<tr>
<th>INTERVIEW</th>
<th>Poor</th>
<th>Average</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does our Program Match their Interests?</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Clinical ability/experience</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Drug distribution abilities/Experience</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Ability to integrate workload</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Interpersonal skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Team building skills</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Positive attitude</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Assertiveness/confidence</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Verbal Communication</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Ability to think “on one’s feet” answer questions.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. View of Pharmacy Practice</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Clinical Question</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Ability to field clinical question</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Strong database</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Interview Points = ________(possible 60 pts)

I. Interview Avg. Points = ________(total divided by 12)

APPLICATION MATERIALS

1. Letter of Intent | 1 2 3 4 5 |
2. Written Communication | 1 2 3 4 5 |

Total Application Points = ________(possible 10 pts)

2. Application Avg. Points = ________(total divided by 2)

3. Interview Questions (separate page) Avg. Pts=______________(Add all possible points (24) divided by 11)

Total Average Points = ___________ (Add 1 + 2 + 3)

Comments: ___________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

115
ATTACHMENT E
REFERENCE CHECK FORM

Reference: Phone: Date:

In what capacity did you know the applicant?

Overall database & clinical skills?

Ability to interact with the medical team?

Independence?

Greatest strength?

Greatest weakness?

Would you hire them?
DEPARTMENT OF VETERANS AFFAIRS  
VA Sierra Nevada Health Care System  
Ioannis A. Lougaris VA Medical Center

March 31, 2016

Dear Resident:

As the Residency Director of the VA Sierra Nevada Health Care System PGY1 Pharmacy Residency Program, it is my pleasure to offer you a PGY1 residency position for the academic year 2016-2017 in Reno, NV. In keeping with the requirements of the ASHP Resident Matching Program, I am sending this letter of confirmation. ASHP requires that you read, sign, and return this letter to me within 2 weeks of receipt. There is a place for signatures below.

The residency will begin July 1, 2016, and end June 30, 2017, unless other arrangements are made with me, at a salary of $41,166 and benefits as noted in previous correspondence. The Human Resources Management Service will be contacting you with more information, processes to complete and forms required prior to employment. Should you have any immediate questions please contact me at 775-326-2738 or Frances González, Administrative Officer, at 775-326-2714.

Also, as discussed with you, I expect that you will take your licensure exam (including the law component) prior to starting the residency program. Your residency experience is directly related to the status of your licensure. The first month will be an orientation month and is not directly affected by licensure. However, the ensuing months will be your actual rotation experiences. Without licensure, skill building will be minimized leading to a less than optimal residency experience. Please note that you are welcome to pursue licensure in Nevada, but it is not a requirement for working at the VA in Reno. The only requirement is that you become licensed in at least one state of your choice.

In addition, you will be provided an office with up-to-date computer systems and paid administrative leave/tuition/travel to at least 2 required conferences and educational events. Please also watch for an additional letter that will be sent from our Human Resource Department further detailing the job offer and conditions of employment (i.e. benefits, insurance, vacation, sick leave, holidays, and salary).

Requirements for pre-employment, Human Resource benefits and requirements for successful completion of the program are listed below. Additional policies on the residency structure, leave, dismissal, duty hours etc. should be reviewed and can be found at the link below in the program Residency Manual:

http://www.reno.va.gov/services/Pharmacy/PGY1Description.asp

Providing World Class Care and Service to America’s Heroes
2.

Your signature below (and initials on each page) confirms that you are in agreement with the results of the National Matching Service and accept a PGY1 residency position at VASNCHS during the 2016-2017 Residency Year.

I have read and understand the Residency Terms and Conditions of Appointment and acknowledge acceptance.

Signature ___________________________ Date __________

Printed Name ___________________________

Your signature below confirms that you have read and agree to the additional terms and conditions of the residency program outlined in the PGY1 Residency Manual.

Signature ___________________________ Date __________

Printed Name __________________________

Please return the signed letter to:
Scott E. Mambourg, Pharm.D., BCPS, AAHIVP
Attn Pharmacy (119)
VA Sierra Nevada Health Care System
975 Kimman Ave
Reno, NV 89552

Sincerely,

Scott E. Mambourg, Pharm.D., BCPS, AAHIVP
Residency Director
3.

**Description:** The VA Sierra Nevada Health Care System Pharmacy Residency is a full-time, temporary appointment of 1 year in duration. Appointment is within the Federal government and residents are therefore subject to all regulations and requirements of the Federal system. In order to complete the on-boarding process and be appointed as a resident at our facility, you must complete the following items prior to July 1:

- **10-2850D Application for Health Profession Trainees**
- **PIV Application Form**
- **Fingerprint Form and complete finger printing process at VA Reno**
- **Successful completion of a background check by Human Resources**
- **VA Privacy and Information Security Awareness and Rules of Behavior** are required for VA computer access. This training is available through the VA Talent Management System (TMS).
- **Physical exam at a VAMC**
- **Random urine drug testing**

**Benefits:**

a. **Stipend:** $41,166

b. **Annual Leave (AL):** 4 hours per pay period (13 days per year)

c. **Sick Leave (SL):** 4 hours per pay period (13 days per year)

d. **Federal Holidays:** 10 paid Federal Holidays

e. **Leave Without Pay (LWOP) and Family Medical Leave Act (FMLA):** Residents are entitled to pre-approved, unpaid leave for FMLA per national policy; however extended periods of leave that would require an extension of the residency program are subject to approval through VA Central Office.

f. **Administrative/Travel Leave:** Authorized absence may be approved for VA authorized travel to professional meetings.

\[\text{g. Health/Life Insurance:} \text{ Pharmacy residents are eligible to participate in the Federal Employees Health Benefit (FEHB) and the Federal Employees Group Life Insurance (FEGLI) Programs.} \]

\[\text{You are responsible for paying a portion of the insurance.} \text{ http://www.opm.gov/} \]

\[\text{h. Liability Insurance:} \text{ You are covered by the "Public Officers Law" and will not need any practice liability insurance during your residency. While performing within your scope of practice and in conformance with VA rules and regulations, the VA will cover all liability issues. Your only risk would be if you exceeded your scope of practice or violate VA policies.} \]

\[\text{i. Employee Assistance Program:} \text{ Getting appropriate support early can prevent difficult situations which may severely interfere with a resident completing the requirements of the program and getting a residency certificate. See:} \text{ http://www.opm.gov/policy-data-oversight/work-life/employee-assistance-programs/} \]

Resident Initials

119
4. Requirements to receive a PGY1 Residency Certificate in the Program:
   - Satisfactory completion of all rotations and required activities. If a rotation is not satisfactorily completed, appropriate remedial work must be completed as determined by the preceptors and program director.
   - Completion of 2080 hours of training.
   - Compliance with all institutional and departmental policies.
   - Satisfactory Progress (s/p) on all goals at the end of the residency.
   - Completion of all assignments and projects as defined by the preceptors and RPD.
   - Completion of a residency project with a draft manuscript submitted in the journal format of choice to the Residency Program Director no later than the day of the Residency Research Conference.
   - Attend at least one professional state or regional meeting and one national meeting (must be pharmacy-related) as approved by the RPD.
   - Participate in recruiting activities for the residency.
   - Contribute to optimal patient care and achieve the mission and goals of the VASNHCS Pharmacy Service.

Resident Initials __________
DEPARTMENT OF VETERANS AFFAIRS
Veterans Health Administration
Sierra Pacific Network
VISN 21 Pharmacy Benefits Management Group
1000 Locust Street
Reno, NV 89502-2597

April 4, 2007

Dear Dr ____________________:

As the Residency Director of the VA Sierra Pacific Network PGY2 Pharmacy Residency in Managed Care Systems, it is my pleasure to offer you a PGY2 residency position for the academic year 2007-8. In keeping with the ASHP Residency Matching Program requirements, I am sending you this letter of confirmation. ASHP requires that you read, sign and return this letter to me within 2 weeks of receipt. There is a place for signature below.

The residency will begin July 1, 2007 and end June 30, 2008 at a salary of $41,070 and benefits include health insurance, 13 days of vacation, 13 days of sick leave, 10 holidays, health/dental benefits, and paid tuition and travel to at least 2 required professional conferences. As we discussed, should you wish to alter the start date slightly to accommodate your move to Reno, please advise me of your start date. The Human Resources Management Service will be contacting you with more information, processes to complete and forms required prior to employment. Should you have any immediate questions please contact me or Beth Rottmann in Human Resources at 775-328-1253.

Please note you are welcome to pursue pharmacist licensure in Nevada, but it is not a requirement for work at the VA in Reno. The only requirement is that you become licensed in at least on state of your choice.

Your signature below confirms that you have read this letter and agree to complete a residency with the VA Sierra Pacific Network during the 2007-2008 Residency Year. We look forward to your response and hope you can join our team in Health Informatics.

__________________________________________
Signature

__________________________________________
Date

__________________________________________
Printed Name

Warm professional regards,

Jannet M. Carmichael, Pharm.D., FCCP, BCPS
VISN 21 Pharmacy Executive
VA Sierra Pacific Network

Proudly Serving America’s Heroes
APPENDIX III: Continuous Quality Improvement (CQI)

This assignment will be completed in the last month of the residency. In order to ensure that this residency program is addressing the needs of our residents, it is important to review the experiences of residents completing the program. You may want to share some aspects of the residency that you found particularly useful, and you may also wish to share aspects of the residency that may have been less rewarding. In this process, and particularly when identifying areas in need of improvement, it is important to identify potential changes that may make the particular process more fulfilling and educational.

From a practical point of view, it is likely that you will find yourself in the position of either creating a new PGY2 residency or directing an existing residency. ASHP does have guidelines to help you design your residency program, but there is also room for individualization. You are currently part of an existing PGY2 residency program. The following assignment will require that you approach the program as if you were walking into an existing program and looking for ways to make improvements. If you were given unlimited resources (staff, time) this would be an easy undertaking, however, that is seldom the case. For this assignment you will:

1. Review the current ASHP Regulations and Standards for Pharmacy Outcomes and Healthcare Analytics (Appendix V)
2. Review ASHP Regulations and Standards for related PGY2 Residency Programs (Advanced Areas of Practice, Informatics, Health System Administration, Medication Safety, and Managed Care Pharmacy Systems)
3. Review other applicable resources available to the current PGY2 Pharmacy Outcomes and Healthcare Analytics Residency Program
4. With consideration of available resources and related PGY2 residencies, identify areas of the residency or outcomes, goals, or objectives that can use improvement
5. Review orientation materials and based on your experiences, suggest ways that the contents be improved and what could be added to improve the orientation process
6. Prepare a written list or plan for improving the current PGY2 Pharmacy Outcomes and Healthcare Analytics Residency Program including, but not limited to:
   a. Orientation for new residents
   b. Changes in existing rotations
   c. Additional rotations
   d. Teaching responsibilities (students, PGY1 residents)
   e. Any other features that could use improvement
APPENDIX IV: Extended Leave of Absence

VETERANS INTEGRATED SERVICE NETWORK 21

PHARMACY SERVICE
RESIDENCY PROGRAMS

POLICIES AND PROCEDURES
FOR RESIDENT REQUESTED
EXTENDED LEAVE OF ABSENCE

SEPTEMBER 2006

Prepared By: Randell K. Miyahara, Pharm.D.
Clinical Coordinator, Pharmacy Service
VA Palo Alto Health Care System

Reviewed By: Melissa Dragoo, Pharm.D., BCPS
PGY1 Residency Program Director
VA Northern California Health Care System

Nancy E. Korman, Pharm.D., FCSHP
Education Coordinator, Pharmacy Service
VA San Francisco Medical Center

Julio Lopez, Pharm.D.
Chief, Pharmacy Service
VA Northern California Health Care System

Scott Mambourg, Pharm.D.
Clinical Pharmacy Coordinator, Pharmacy Service
VA Sierra Nevada Health Care System

Jannet M Carmichael, Pharm.D., FCCP, BCPS
VISN 21 Pharmacy Executive
VA Sierra Pacific Network

Approved By:
1.0 Background
A Postgraduate Year One (PGY1) or Postgraduate Year Two (PGY2) Pharmacy Resident is offered a unique opportunity to be trained in a well-organized health care system, but is only given a temporary appointment at the facility. This temporary appointment does not allow the resident full access to certain leave policies (e.g., Family and Medical Leave Act). Nonetheless, a resident may find him/herself in a situation that requires that they request an extended period of time off. In the event that the Residency Program Director (RPD), Chief of Pharmacy or facility Human Resources service cannot utilize established policies or procedures to adequately accommodate a resident’s request for extended leave, this policy and procedure has been established to provide guidance.

The RPD, Chief of Pharmacy, or Human Resources service is in no way obligated to exercise this policy and procedure. This policy and procedure does not supersede, negate or otherwise nullify any standing national, regional (e.g., VISN 21) or local policy regarding leave.

2.0 Policy
In the event that a resident requests an extended period of time off and is granted leave without pay (LWOP) to accommodate this request, the resident will have their temporary appointment extended beyond one year, in the amount of time necessary to complete their training. This extended amount of time is typically the same amount of time as the LWOP granted to the resident.

3.0 Definitions
Extended Leave Request
A leave request will be considered an extended leave request when the time off requested is for longer than 3 working days, but shorter than 6 months. Requests shorter than 3 working days that cannot be covered by accrued annual leave (AL), sick leave (SL) (if appropriate), or at the discretion of the Chief of Pharmacy, leave without pay (LWOP) are not considered significant enough to extend a residency beyond the scheduled one year appointment and will not be addressed in this policy & procedure. It is recognized that a resident gains experience throughout the course of the year. If a resident is unable to return to the residency after 6 months, the resident is unable to build upon their experience gained prior to the leave. In this case, it is recommended that the resident voluntarily withdraw or resign from the residency.

4.0 Procedure
Trainees such as pharmacy residents who have legitimate reasons for extended leave can be placed on Leave Without Pay (LWOP) after using their accrued annual and sick leaves. It would be a rare occasion for a facility to grant advanced leave. Most facilities won't agree to put trainees in the Voluntary Leave Sharing Program but it has been approved for special circumstances. The resident who goes on LWOP may return to complete the program in a paid status for a time extension equal to the time of the LWOP. If additional time is needed beyond the extension to meet the training objectives that will not be met because of the extended absence on annual and sick leave, any additional time will be without pay. VA’s Office of Academic Affiliations (OAA) will only pay for the equivalent of 12 months.

4.1 Resident requests leave
The resident must submit her/his leave request to the RPD in writing. If at all possible, the resident is encouraged to submit the request 2 months prior to requested time off. In the event of an emergent request, the resident should submit the request to the RPD as soon as possible. The written request should include:

- Dates requested off
- Reason for leave
- Amount of AL and SL accrued
4.2 RPD review of leave request
Upon receipt of resident’s extended leave request, the RPD has (X number of hours? Days?) to review the request for completeness.

4.2.1 RPD meets with resident to discuss request
RPD discusses request with resident, presents alternative options (e.g., use of AL, or SL) to accommodate request. Depending on length of requested leave, RPD may need to advise resident that they will be responsible to pay their share of benefits (portion that is normally deducted from paycheck), or risk losing benefits. (Government will typically continue to pay its portion of benefits, though facility’s Fiscal department will have to be advised and a plan will have to be in place to secure this funding prior to leave being approved.)

4.2.2 RPD discusses request with Chief of Pharmacy
Based on written request and discussion with resident, RPD meets with Chief of Pharmacy to review request and potential ways to accommodate request. If RPD and Chief of Pharmacy refuse to accommodate request, RPD will present this decision to the resident and document decision in writing. If RPD and Chief of Pharmacy wish to determine accommodation to request using a LWOP and extending the residency, the RPD will contact the following sections to advise of situation and develop plan.

4.2.3 RPD contacts facility HR, Fiscal
4.2.4 RPD contacts VA PBM and OAA
VA PBM Contact: Lori Golterman, Bill Jones
OAA Contact: Linda D. Johnson, Ph.D., R.N., Director, Associated Health Education

4.3 Based on guidance, RPD develops accommodation to leave request

4.3.1 Approval of accommodation by Chief of Pharmacy

4.4 RPD reviews approved accommodation with resident

4.4.1 RPD documents resident review and acceptance of approved accommodation

4.4.2 Approved accommodation not accepted by resident

4.5 RPD notifies Chief of Pharmacy, facility HR and Fiscal, VA PBM and OAA of accepted, approved accommodation

4.5.1 Notification of OAA
If the extension goes into the next fiscal year (after September 30), the Office of Academic Affiliations (OAA) will send next fiscal year's funds to pay for the extension in the next year. When a resident goes on LWOP, the program director should discuss this situation with the facility fiscal people to:

1. Tell them that the person is on LWOP but will be returning so fiscal won't send all of the unused money back to OAA;
2. Tell them the anticipated date of return so they'll know how much, if any, of the money should be returned to OAA that won't be used in the fiscal year; and
3. Let them know that OAA will be sending additional funds in the next fiscal year to pay for the period of extension that goes into the next fiscal year.

The facility residency program director should let the Office of Academic Affiliations, Director of Associated Health Education know of the situation and how much funding, if any, will be needed in the next fiscal year to pay for the extension.

4.6 Resident goes on extended leave

4.7 Resident returns from extended leave
APPENDIX V: Outcomes, Goals, & Objectives

Educational Outcomes, Goals, and Objectives for Postgraduate Year Two (PGY2) Pharmacy Outcomes & Healthcare Analytics Residency Programs

Overview of PGY2 Pharmacy Outcomes & Healthcare Analytics Residencies

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 information technology, informatics, and data analysis while concurrently utilizing the practices of evidence-based medicine, outcomes measurement, and process improvement. Throughout the program, residents will develop proficiency in pharmacoeconomics, data analytics, outcomes assessment, and creation of practice improvement at the population level. 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. Graduates of this program will achieve mastery in these practice areas, enabling them to apply robust methodologies to optimize quality and outcomes initiatives within health care management and/or policy organizations. They will be adept in the language and concepts of information technology and programming (e.g. SQL), software programs (e.g. Visual Studio, Performance Point, Microsoft Office, Reporting Services) and applied pharmacoeconomic principles, while also possessing enhanced leadership and managerial skills. The graduate will be fully capable of creating pharmacoeconomic proposals, searching data warehouses to create reports and dashboard tools, managing formularies and developing and applying drug use criteria to both populations and individual patients.

Upon completion of the residency graduates are prepared for a practice position in a multitude of healthcare environments. They are equipped to practice as a pharmacoeconomic pharmacist for a single pharmacy department, a regional network, or national program, they can assume a role in a sub-specialty of pharmacy informatics, or can become clinical data analysts and managers for facilities or entire healthcare networks. Additionally, graduates have gone on to work in areas such as quality improvement and managed care and remain exposed to sufficient clinical information, current literature, and practice guidelines during the year to remain capable of practicing in direct patient care positions.
Explanation of the Contents of This Document:

Each of the document’s objectives has been classified according to educational taxonomy (cognitive, affective, or psychomotor) and level of learning. An explanation of the taxonomies is available elsewhere.²

The order in which the required educational outcomes are presented in this document does not suggest relative importance of the outcome, amount of time that should be devoted to teaching the outcome, or sequence for teaching.

The educational outcomes, goals, and objectives are divided into those that are required and those that are elective. The required outcomes, including all of the goals and objectives falling under them, must be included in the design of all programs. The elective outcomes are provided for those programs that wish to add to the required outcomes. Programs selecting an elective outcome are not required to include all of the goals and objectives falling under that outcome. In addition to the potential elective outcomes contained in this document, programs are free to create their own elective outcomes with associated goals and objectives. Other sources of elective outcomes may include elective educational outcomes in the list provided for PGY1 pharmacy residencies and educational outcomes for training in other PGY2 areas. Each of the goals falling under the program’s selection of program outcomes (required and elective) must be evaluated at least once during the resident’s year.

Educational Outcomes (Outcome): Educational outcomes are statements of broad categories of the residency graduates’ capabilities.

Educational Goals (Goal): Educational goals listed under each educational outcome are broad sweeping statements of abilities.

Educational Objectives (OBJ): Resident achievement of educational goals is determined by assessment of the resident’s ability to perform the associated educational objectives below each educational goal.

Instructional Objectives (IO): Instructional objectives are the result of a learning analysis of each of the educational objectives. They are offered as a resource for preceptors encountering difficulty in helping residents achieve a particular educational objective. The instructional objectives falling below the educational objectives suggest knowledge and skills required for successful performance of the educational objective that the resident may not possess upon entering the residency year. Instructional objectives are teaching tools only. They are not required in any way nor are they meant to be evaluated.

Required Educational Outcomes, Goals, and Objectives for Postgraduate Year Two (PGY2) Pharmacy Residencies in Pharmacy Outcomes and Healthcare Analytics

Outcome R1: Demonstrate effective leadership and practice management skills in the areas of administration, analytics, informatics, and outcomes.

Goal R1.1: Exhibit ongoing development of the essential personal skills of a practice leader.

OBJ R1.1.1 (Characterization) Practice self-managed continuing professional development with the goal of improving the quality of one’s own performance through self-assessment and change.

IO State criteria for judging one’s performance of tasks that are critical in one’s own practice.

IO Explain the role of participation in pharmacy professional organization meetings in the ongoing development of expertise in pharmacy outcomes and healthcare analytics.

IO Explain the importance of continuing to remain current and grow in both clinical and management skills.

IO Explain the role of board certification in the development and maintenance of expertise in drug information practice.

IO Explain the importance of staying current with pertinent biomedical literature.

IO Explain the importance of staying current with health news in popular media and within the organization.

IO Explain the leadership role of a data manager, pharmacoeconomic pharmacist, and healthcare analyst within the organization.

OBJ R1.1.2 (Characterization) Demonstrate commitment to the professional practice of pharmacy through active participation in the activities of local, state, and/or national pharmacy professional organizations.

IO Explain the importance of contributing to the work of pharmacy professional organizations in advancing the visibility of the pharmacist’s role in the overall care of patients.

OBJ R1.1.3 (Application) Devise an effective plan for balancing professional and personal life and use time management skills effectively to fulfill practice responsibilities.

IO Explain the importance of balancing professional and personal life.

IO Explain an effective system for the management of one’s time in professional practice.

IO Explain the importance of prioritizing according to the level of importance and rapidly adapting to change.

IO Explain how to develop a reasonable timeline for a project.

IO Explain strategies for satisfactorily making progress on several projects simultaneously.

OBJ R1.1.4 (Synthesis) Initiate and maintain a systematic approach to documenting professional activities and accomplishments.

OBJ R1.1.5 (Characterization) Display integrity in professional relationships and actions and use sound ethical reasoning to guide practice decisions.

IO Explain ethical dilemmas that may confront a clinician working as a data manager, pharmacoeconomic pharmacist, or other related profession under the pharmacy outcomes and healthcare analytics umbrella.

IO Explain ethical principles embodied in the American Pharmacists Association Code of Ethics for Pharmacists.

IO Explain the implications of the Belmont Report for ethical decision-making in pharmacy.

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OBJ R1.1.6 (Analysis) Identify potential conflict-of-interest situations in the fields of pharmacoeconomics, healthcare analytics, and pharmacy outcomes

IO Explain the concept of perceived conflict-of-interest versus actual conflict-of-interest.

IO Explain the types of conflict-of-interest that may arise in research, purchasing, formulary decision-making, publishing, and professional practice.

OBJ R1.1.7 (Application) Adhere to the requirements of the organization’s policy in all interactions with pharmaceutical industry representatives.

IO Explain the potential conflicts inherent in the objectives of one’s health care organization and the objectives of a pharmaceutical industry representative.

IO Appraise current policies governing relations between the organization and the pharmaceutical industry to ensure that ethical practices are observed.

IO Explain why pharmaceutical industry representatives regard PBM staff members and pharmacy outcomes specialists as influential individuals in their organization.

IO Explain the appropriate relationship between the drug information specialist and a pharmaceutical industry representative.

Goal R1.2: Contribute to the leadership and management activities within the pharmacy outcomes and healthcare analytics field by exercising superior communication and political skills.

OBJ R1.2.1 (Analysis) When confronted with a barrier to the accomplishment of a particular project, analyze the organizational environment, including its structure, network of resources, and politics, to determine a strategy for achieving success.

IO Explain the organization’s structure including the function of each of its departments and key individuals.

IO Explain the importance of effective networking in removing barriers.

IO Explain how to identify key stakeholders of a given project.

IO Explain the importance of persuasion as a skill of effective leaders.

IO Compare and contrast the types of persuasive arguments that are potentially effective.

IO Identify formal and informal medical staff leaders and how they can help achieve the desired goal.

OBJ R1.2.2 (Synthesis) Create an effective professional network.

IO Explain formal and informal techniques for networking.

Goal R1.3: Exercise practice leadership.

OBJ R1.3.1 (Characterization) Demonstrate enthusiasm and passion for the profession of pharmacy.

OBJ R1.3.2 (Comprehension) Explain the nature of mentoring in pharmacy, its potential connection with achievement, and the importance of being willing to serve as a mentor to appropriate individuals.

OBJ R1.3.3 (Comprehension) Explain the general processes of establishing and maintaining an ASHP-accredited PGY-2 residency program.

Outcome R2: 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.

Goal R2.1: Develop collaborative professional relationships with members of the PBM staff, various health care teams, taskforces, and workgroups.

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4 Evidence-based medicine -- the integration of best research evidence, clinical expertise, and patient values in making decisions about the care of individual patients (Institute of medicine, 2001; Straus and Sackett, 1998). Best research evidence includes evidence that can be quantified, such as that from randomized controlled trials, laboratory experiments, clinical trials, epidemiological research, and outcomes research and evidence derived from the practice knowledge of experts, including inductive reasoning (Guyatt et al., Higgs et al., 2001). Clinical expertise is derived from the knowledge and experience developed over time from practice, including inductive reasoning. Patient values and circumstances are the unique preferences, concerns, expectations, financial resources, and social supports that are brought by each patient to a clinical encounter. (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academies Press; 2001.)
OBJ R2.1.1 (Synthesis) Use group participation skills when leading or working as a member of a formal or informal work group or taskforce to establish openly communicative and collaborative working relationships.

IO Explain the value of good peer relationships in the achievement of informatics projects.
IO Explain methods for achieving consensus.
IO Explain how to create an agenda for a meeting.
IO Explain methods for assuring participation by all members of a group.
IO Explain methods for effective group leadership.
IO Explain the roles and responsibilities of the facilitator of a meeting.
IO Explain effective strategies for facilitating meetings.

OBJ R2.1.2 (Analysis) Determine the appropriate type of communication, and the medium and organization for it, using an understanding of the target audience, the characteristics of the information to be communicated, effectiveness, efficiency, customary practice and the recipient's preferences.

IO Accurately identify the primary theme or purpose of one's written, oral, or virtual communication.
IO Accurately determine what information will provide credible background to support or justify the primary theme of one's communication.
IO Logically sequence ideas in written and oral communication.
IO Accurately determine the depth of communication appropriate to one's audience.
IO Accurately determine words and terms that are appropriate to one's audience.
IO Accurately determine one's audience's needs.
IO Accurately identify the length of communication that is appropriate to the situation.
IO Explain the importance of assessing the receiver's understanding of the message conveyed.
IO Explain techniques for persuasive communication.
IO Explain the value of consulting with administrators and key decision-makers when choosing route(s) for communication of information.
IO Explain issues, including confidentiality, surrounding the choice of media to communicate information.
IO Explain the differences in language (e.g., jargon, acronyms) used to communicate among the various disciplines involved in pharmacy outcomes and healthcare analytics.
IO Explain the importance of adjusting one's communications for the specific category of health professional (e.g., nurses, physicians, respiratory therapist, etc.).

Goal R2.2: Lead departmental and/or interdisciplinary teams in the design, implementation, and/or enhancement of the organization’s criteria for medication use, monitoring, and outcomes measurement.

OBJ R2.2.1 (Synthesis) Collaborate with an interdisciplinary team to write or revise an existing guideline, measure/metric, policy, or protocol.

IO Appraise current policies and procedures for congruence with the organization’s mission, goals, and needs.

Goal R2.3: Prioritize development of analytic tools that improve and assist clinicians in patient care.

OBJ R2.3.1 (Evaluation) Appropriately prioritize development of analytic tools based on potential for improvement of patient care if given limited time and multiple responsibilities.

IO Explain factors to consider when determining priority for patient-care improvement projects.
IO Explain how the complexity or severity of patient problems may mandate urgency of tool development and reordering of current priorities.

Goal R2.4: Assure that all patient-specific, medication-specific, and evidence-based pharmacotherapy information required to support effective medication-related decisions is readily available in a useful format to members of interdisciplinary, patient-centered teams.
OBJ 2.4.1  (Synthesis) Effectively present the benefits of functionally integrated evidence-based and other knowledge resources, analysis tools, and medication information systems.

IO  Demonstrate utilization of analysis tools to members of interdisciplinary teams who will be using them in their daily practice.

Goal R2.5:  Guard the confidentiality and security of health data stored in the health care organization’s database.

OBJ R2.5.1  (Comprehension) Explain the organization’s regulatory policies for maintaining security of patient information.

OBJ R2.5.2  (Synthesis) Collaborate with information technology and other professionals to assess analysis tool security and patient protections for conformance with accepted standards including access control, data security, data encryption, HIPAA privacy regulations, and ethical and legal issues.

IO  Explain accepted criteria for system security.

IO  Explain current HIPPA regulations and the application of those regulations to pharmacy technology and automation systems.

Outcome R3: Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.

Goal R3.1:  Establish oneself as an expert for data retrieval, medication information, and outcomes-related resources within the organization.

OBJ R3.1.1  (Synthesis) Implement a successful strategy for earning credibility within the organization to be an authoritative expert on the creation of analytic tools, measurement of outcomes, and overall evidence-based medication-related care of patients.

IO  Identify opportunities for the pharmacy outcomes and healthcare analytic specialist to earn credibility with members of the various interdisciplinary taskforces.

IO  Identify opportunities for the specialist to earn credibility within the PBM and various providers within the organization.

OBJ R3.1.2  (Synthesis) Fulfill requests provider-requested data, reports, usage/cost information, or outcomes in an accurate and efficient manner.

OBJ R3.1.3  (Comprehension) Answer questions and troubleshoot issues from users of the organization’s analysis tools, criteria, cost, or policies and procedures.

Goal R3.2:  Contribute pharmacist perspective and expertise regarding the development, implementation, utilization, and revision of outcomes measures and metrics, and analysis tools in interactions with information technology staff, PBM staff, clinicians and end users.

OBJ R3.2.1  (Application) Participate in the development of project timelines, financial projections, and outcomes measurement

IO  Explain the potential contributions of the following to the achievement of a safe and effective system:

1. Formulary systems
2. Medication-use guidelines
3. Medication-use restrictions
4. Evidence-based protocols
5. Care paths
6. Disease state management
7. Wellness management
8. Provider education including academic detailing
9. Patient education
10. Outcomes studies
11. Benchmarking
12. Technology and automated systems
13. Medication distribution systems and control
14. Analytics tools and software

OBJ R3.2.2  (Synthesis) When presented with a non-standard problem, apply lateral (out-of-box) thinking to its solution

IO  Troubleshoot dashboards/reports with error in the code
Goal R3.3: Critically evaluate and employ advanced analysis skills to relevant biomedical literature in preparing analysis tools, drug information responses, pharmacoeconomic proposals, and drug use criteria.

OBJ R3.3.1 (Evaluation) Determine if the study design and methodology are appropriate to accomplish the objectives of a piece of biomedical literature.

OBJ R3.3.2 (Evaluation) Accurately interpret statistical information presented in a piece of biomedical literature.

IO Explain the application and interpretation of advanced statistical methods.

IO Determine instances in which a study conclusion is erroneously supported by data display.

OBJ R3.3.3 (Analysis) Identify potential sources of bias in a piece of biomedical literature.

OBJ R3.3.4 (Evaluation) Determine the internal and external validity of a piece of biomedical literature and if a study’s results have applicability for hypothesizing future research or for directing patient care decisions.

OBJ R3.3.5 (Evaluation) When presented with conflicting biomedical literature, determine the validity and applicability for organizational need.

IO Compare and contrast the reputations and peer-review procedures of biomedical journals.

OBJ R3.3.6 (Evaluation) When presented with limited evidence-based biomedical literature, synthesize a reasonable proposal for the specific information need in collaboration with members of relevant taskforces or workgroups.

OBJ R3.3.7 (Evaluation) Appraise information provided by a pharmaceutical manufacturer.

OBJ R3.3.8 (Synthesis) Design tools and measures that perform patient-centered, evidenced-based monitoring for a therapeutic regimen or disease state that effectively evaluates achievement of the specified therapeutic goals.

IO Identify monitoring tools utilized and discuss monitoring parameters for the analyzed diseases and conditions.

IO Identify customary monitoring parameters for medications commonly prescribed for diseases and conditions being analyzed.

OBJ R3.3.9 (Analysis) Conduct a pharmacoeconomic analysis to support a medication policy and/or process recommendation or decision (decision analysis, CEA, CBA, CMA, CUA).

IO Explain the principles and methodology of pharmacoeconomic analysis.

IO Explain reliable sources of data.

Goal R3.4: Identify opportunities for improving the safety of aspects of the organization’s medication-use system through analysis tools, measures, metrics, guidelines and policies.

OBJ R3.4.1 (Application) Assist in the organization’s reporting and preventing medication errors and adverse drug reactions (ADEs) through development/maintenance of analysis tools, updating DUC, reporting alerts at meetings, or other means as necessary.

Goal R3.5: Assist the organization in achieving compliance with accreditation, legal, regulatory, and safety requirements related to the use of medications (e.g., Joint Commission requirements; ASHP standards, statements, and guidelines; state and federal laws regulating pharmacy practice; OSHA regulations).

OBJ R3.5.1 (Evaluation) Determine appropriate activities and documentation needed to meet accreditation, legal, regulatory, and safety requirements for pharmacy.

IO Explain the influence of accreditation, legal, regulatory, and safety requirements on clinical practice.

Outcome R4: Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.

Goal R4.1: Provide effective education and training on pharmacoeconomic proposals, analysis tools/software utilization, academic detailing goals, or general drug therapy topics to health care professionals and health care professionals in training.

OBJ R4.1.1 (Application) Use effective educational techniques in the design of all educational activities.

IO Identify emerging issues in securing and integrating evidence-based information suitable for educational sessions.
IO Identify changes in medication-use or newly developed analysis tools that require training of staff within the organization.

IO Explain the differences in effective educational strategies when teaching colleagues versus residents versus students versus health professionals in other disciplines.

IO Design instruction that meets the individual learner’s needs.

IO Explain how different instructional delivery systems (e.g., demonstration, written materials, web-based) foster different types of learning.

IO Design instruction that employs strategies, methods, and techniques congruent with the objectives for an education or training program.

OBJ R4.1.2 (Application) Use advanced public speaking skills to communicate effectively in large and small group situations.

IO Explain techniques that can be used to enhance audience interest.

IO Explain techniques that can be used to enhance audience understanding.

IO Explain speaker habits that distract the audience.

IO Explain the importance of developing excellence in public speaking for fulfillment of the role as a pharmacoeconomic pharmacist or data manager/analyst.

IO Explain a systematic method for ongoing improvement in one’s own public speaking skills.

Goal R4.2: Design and deliver education programs to the public that center on health improvement, wellness, and disease prevention.

OBJ R4.2.1 (Synthesis) Use appropriate educational techniques to deliver an educational program to the public that centers on health improvement, wellness, or disease prevention.

Goal R4.3: Design and present Academic Detailing education programs to healthcare providers and patients in order to improve patient outcomes.

OBJ R4.3.1 (Synthesis) Contribute to the design of evidence-based, non-commercial educational programs for outreach to healthcare providers and patients that centers on health improvement, wellness, or disease prevention.

IO Explain appropriate medication-related educational topics for health care support groups.

IO Explain appropriate medication-related educational topics for the general public.

OBJ R4.3.2 (Synthesis) Contribute to Academic Detailing programs by training participating providers on the use of analysis tools which measure outcomes that coincide with the program’s desired goals.

IO Explain how to use analysis tools via virtual training sessions.

IO Explain how available analysis tools can assist academic detailers.

Outcome R5: Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.

Goal R5.1: Demonstrate a working knowledge of available technology for prescribing, order processing, distribution/dispensing, monitoring, safe and efficient administration, administration documentation

OBJ R5.1.1 (Comprehension) Demonstrate a working knowledge of available technology for prescribing, order processing, distribution/dispensing, monitoring, safe and efficient administration, administration documentation

Goal R5.2: Demonstrate and apply understanding of basic analytics principles, standards, and best practices.

OBJ R5.2.1 (Application) Utilize best practice strategies to maximize code performance.

IO Explain the need for efficient programming.

IO Explain the function of indexes in SQL programming and the proper utilization of clustered indexes.

IO Demonstrate the ability to reorganizing queries to improve performance.

OBJ R5.2.2 (Comprehension) Express understanding of the functions and purposes of SQL Server, Reporting Services, Visual Studio, ProClarity, MS Office Programs, SharePoint, and
Performance Point from the perspective of a pharmacist working in outcomes and healthcare analytics

IO Explain the advantages of dashboards and reports
IO Describe best practices to effectively design dashboards and report tools

OBJ R5.2.3 (Evaluation) Exercise proficiency in the use of databases and data analysis software to successfully construct reports and dashboards
IO Explain the concept of dimensional modeling.
IO Explain how the design of the data warehouse facilitates decision making.
IO Explain the difference between transactional and analytic database design.
IO Explain how to develop analysis tools that are sufficiently detailed to support desired user goals.
IO Evaluate the effectiveness, utilization, and quality of the tools requested by providers within the organization.
IO Explain the principles and uses of databases in the management of large volumes of data.
IO Draw upon appropriate databases to answer posed questions
IO Perform statistical analyses for the purpose of evaluating the data.
IO Draw accurate conclusions regarding significance of information

OBJ R5.2.4 (Comprehension) Explain the concept of data warehousing and its uses in clinical and operational decision-making.

OBJ R5.2.5 (Synthesis) Apply an understanding of evidence-based medication therapy management to contribute to the establishment of process and outcomes measurements that would be used to manage and evaluate the implementation and success of a disease management and/or medication therapy management program.
IO Explain the concept of process measurements.
IO Explain the concept of outcomes measurements.
IO Explain commonly used process measurements.
IO Explain commonly used outcomes measurements.

Goal R5.3: Execute an original project through the analysis tool life cycle.

OBJ R5.3.1 (Synthesis) Contribute to the creation and development of a new analysis tool.
IO Explain how to develop metrics for evaluation of outcomes using analysis tools

OBJ R5.3.2 (Synthesis) Contribute to the development of a plan for testing of an analysis tool and evaluate validity of the information
 IO Explain the concept of interface testing.
 IO Explain the concept of testing for the validity of data.
 IO Explain the concept of functional testing.
 IO Explain the concept of testing for clinical validity.
 IO Explain the concept of regression testing.
 IO Explain the concept of usability testing.
 IO Explain the value of release notes for technology or automation upgrades
 IO Explain the necessity of balancing decisions for what to include in the analysis tool relative to available resources.

OBJ R5.3.3 (Synthesis) Contribute to the implementation and training for the new analysis tool.
 IO Explain the various disciplines that are stakeholders when implementing a new technology or tool.
 IO Explain how to create and implement a training program.

OBJ R5.3.4 (Synthesis) Contribute to the maintenance of analysis tools.
 IO Update code when changes to the underlying data are made
 IO Troubleshoot issues as they arise

Outcome R6: Understand a pharmacy benefits management structure and contribute to the organization’s formulary management.

Goal R6.1: Understand the interrelationship of the pharmacy benefit management function, and the network health care systems.
OBJ R6.1.1  (Comprehension) Explain the elements of managed care, including benefit design and management, co-pay, formulary, utilization management, prior authorization, consults, access, and contract negotiations (medication acquisition and/or network pharmacies).

IO  Compare VA PBM function against private sector PBMs
IO  Explain patient eligibility requirements.
IO  Describe the methods for pharmaceutical procurement.

OBJ R6.1.2  (Comprehension) Explain the principles of the financial management of the organizational unit.

IO  Describe elements of the organization’s financial plan
IO  Describe the data elements of productivity measures (e.g. operational activities, budgets, FTE, etc.)

Goal R6.2:  Provide pharmacy expertise to the organization in the area of managed care by contributing to the ongoing development of the organization’s formulary through review of existing, development of new, and implementation of pharmaceconomic proposals, drug use criteria, and organizational policies and procedures affecting the care of patients.

OBJ R6.2.1  (Analysis) Create a written DUC or pharmaceconomic proposal for a medication, class, or disease state that is to be considered by the organization’s P&T committee for approval.

IO  Explain signs and symptoms, epidemiology, risk factors, pathogenesis, natural history of disease, pathophysiology, clinical course, etiology, of the disease(s) to be treated by the drug under consideration.

IO  Explain the mechanism of action, pharmacokinetics, pharmacodynamics, pharmaceconomics, usual regimen (dose, schedule, form, route, and method of administration), indications, contraindications, interactions, adverse reactions, and therapeutics of the drug under consideration.

IO  Explain the structure and types of information supplied by pharmaceutical manufacturers using the organization’s template format.

IO  Explain likely sources of relevant information not contained in the materials supplied by the pharmaceutical manufacturer.

IO  Explain the characteristics of scientific writing.

IO  Explain factors to consider when judging the safety, the efficacy, or the pharmaceconomics of a specific medication.

OBJ R6.2.2  (Synthesis) When appropriate, present the recommendations contained in to members of the P&T Committee.

IO  Explain the composition and responsibilities of the organization’s P&T committee.

IO  Explain an appropriate style of presentation for P&T committee meetings.

OBJ R6.2.3  (Synthesis) Participate in the communication of information regarding formulary design and/or changes.

OBJ R6.2.4  Review authorization requests for non-formulary agents and render a decision based on DUC guidelines and information provided by the requester/provider

Goal R6.3:  Understand the organization’s process for contracting with pharmaceutical manufacturers.

OBJ R6.3.1  (Knowledge) State the types of contracts possible with pharmaceutical companies.

IO  Describe the purchasing hierarchy

OBJ R6.3.2  (Comprehension) Explain what affects drug pricing in the marketplace.

OBJ R6.3.3  (Comprehension) Explain the organization’s process for negotiating the price of medications with a manufacturer.

Outcome R7: Perform effective direct patient care on high-risk or other target patients using developed analysis tools as part of a population management strategy.

Goal R7.1:  Collect and analyze patient information.

OBJ R7.1.1  (Application) Effectively identify high risk or targeted patients using analysis tools such as dashboards or reports and prioritize the delivery of pharmaceutical care.

OBJ R7.1.2  (Analysis) Collect and organize all patient-specific information needed to assess/resolve a medication-related problem and to make appropriate evidence-based, patient-centered,
medication and/or non-medication, health improvement, wellness, and/or disease prevention recommendations in collaboration with the interdisciplinary team.

Goal R7.2: Establish collaborative pharmacist-patient and pharmacist-caregiver relationships.

OBJ R7.2.1 (Synthesis) Implement a strategy that effectively establishes a patient-centered pharmacist-patient and pharmacist-caregiver relationship.

IO Explain the importance of describing to the patient the pharmacy specialist’s role in his/her care.

IO Explain potential barriers to relationship development with individual patients (age, mental status, educational level, health literacy).

IO Explain the views of diverse cultures and religions on the conceptualization of illness, treatment, and of death and dying.

Goal R7.3: Appropriately triage patients if necessary.

OBJ R7.3.1 (Evaluation) When presented with a patient with health care needs that cannot be met by the pharmacy specialist, request a consult by the appropriate health care provider based on the patient’s acuity and the presenting problem.

OBJ R7.3.2 (Synthesis) Devise a plan for follow-up on a consult for a patient.

Goal R7.4: Design evidence-based therapeutic regimens.

OBJ R7.4.1 (Synthesis) Specify therapeutic goals for the patient, incorporating the principles of evidence-based medicine that integrate patient-specific data; disease, medication and non-medication-specific information; ethics; and quality-of-life considerations.

IO Explain the use of evidence-based consensus statements and guidelines in the setting of patient-specific therapeutic goals.

IO Explain how culture influences patients’ perceptions of desirable outcomes.

IO Explain the importance of the patient's perception of desirable outcomes when setting therapeutic goals for a patient with functional limitations.

IO Explain the impact of quality-of-life issues on making decisions about therapeutic goals.

IO Explain ethical issues that may need consideration when setting therapeutic goals.

IO Compare and contrast the realistic limits of treatment outcomes among the various care settings.

IO Explain how a patient’s age or mental status might affect the setting of therapeutic goals.

IO Explain the patient’s role in determining his/her therapeutic goals.

Goal R7.5: Design evidence-based monitoring plans.

OBJ R7.5.1 (Synthesis) Design or redesign the patient-centered regimen to meet the evidence-based therapeutic goals established for the patient; integrates patient-specific information, disease, medication and non-medication-specific information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles.

IO Explain the use of evidence-based consensus statements and guidelines in the design of patient-specific therapeutic regimens.

IO Accurately interpret best evidence for use in the design of a patient-centered regimen for a specific patient.

IO Explain how to integrate seemingly applicable findings of best evidence with clinical judgment to arrive at an optimal evidence-based regimen for a specific patient.

IO Explain additional concerns with adherence, persistence, cost, and route of administration when making decisions on medication regimens.

Goal R7.6: Recommend regimens and monitoring plans.

OBJ R7.6.1 (Application) Recommend or communicate the patient-centered, evidence-based, medication and/or non-medication, health improvement, wellness, and/or disease prevention regimen and corresponding monitoring plan to other members of the interdisciplinary team, and to the patient when appropriate, in a way that is systematic, logical, accurate, timely, and secures consensus.

IO Explain the importance of explicitly citing the use of best evidence when recommending or communicating a patient’s regimen and monitoring plan.
Goal R7.7: Design education for a patient’s regimen and monitoring plan.

OBJ R7.7.1 (Analysis) Accurately identify what healthcare professional-delivered education will be essential to the patient’s understanding of the therapeutic plan, how to adhere to it, and the importance of adherence and persistence.

IO Explain what would be a pharmacist’s responsible professional behavior in the circumstance that a patient contests a proposed treatment.

IO Explain strategies for convincing patients of the importance of adhering to their therapeutic plans.

Goal R7.8: Implement regimens and monitoring plans.

OBJ R7.8.1 (Evaluation) Use information technology and analysis tools to make decisions regarding patient targeting, monitoring, and continued intervention as well as to reduce potential error.

OBJ R7.9.1 (Evaluation) Accurately assess the patient’s progress toward the therapeutic goal(s).

OBJ R7.9.2 (Synthesis) Redesign the patient’s regimen and monitoring plan as necessary, based on evaluation of monitoring data and therapeutic outcomes.

IO Gather data as specified in a monitoring plan.

IO Explain factors that may contribute to the unreliability of monitoring results (e.g., patient-specific factors, timing of monitoring tests, equipment errors, and outpatient versus inpatient monitoring).

IO Determine reasons for a patient’s progress or lack of progress toward the stated health care goal.

IO Explain the importance of the analysis of trends over time in monitoring parameter measurements.

IO Accurately assess the effectiveness of a patient-specific education.

Goal R7.10: Communicate pertinent patient information to facilitate continuity of care.

OBJ R7.10.1 (Application) Ensure that accurate and timely patient-specific information reaches those who need it at the appropriate time.

OBJ R7.10.2 (Synthesis) Formulate a strategy for continuity of pharmaceutical care across all applicable treatment settings.

IO Explain potential problems that may place patients at risk in various treatment settings (e.g., hospital, clinic, home) or upon change in level of care.

IO Explain accrediting organizations’ requirements for medication reconciliation across the continuum of care.

IO Explain methods for coordinating information between multiple pharmacy and other health care workers serving the needs of patients that will facilitate the provision of pharmaceutical care.

Goal R7.11: Document direct patient-care activities appropriately.

OBJ R7.11.1 (Application) Write timely and authoritative consults and notes according to the organization’s policies and procedures.

IO Explain the organization’s policies and procedures for documenting direct patient-care activities.

IO Explain the content and format of progress notes.

Outcome R8: Contribute to the body of pharmacotherapy knowledge by conducting outcomes-based research or quality improvement projects with the assistance of analysis tools.

Goal R8.1: Conduct a pharmacy outcomes and/or health analytics-related research or QI project using effective research and project management skills.

OBJ R8.1.1 (Synthesis) Identify a topic of significance for a pharmacy-related research project that requires institutional review board (IRB) review or approval through a quality improvement (QI) process.

IO Explain the types of resident projects (e.g., prospective, retrospective, clinical trials) that will meet residency program project requirements and timeframe.

IO Explain how one determines if a potential project topic is of significance in one’s particular practice setting.
IO Explain how to conduct an efficient and effective literature search for the background analysis.

IO Explain how to generate a research question(s) to be answered by an investigation.

OBJ R8.1.2 (Synthesis) Formulate a feasible design for a pharmacy-related research project.
IO Explain the elements of a project proposal.
IO Explain how to identify health care personnel who will be affected by the conduct of the project and strategies for gaining their cooperation.
IO Explain how to determine a timeline with suitable milestones that will result in project completion by an agreed-upon date.
IO Explain various methods for constructing data collection tools.

OBJ R8.1.3 (Synthesis) Secure any necessary approvals, including IRB, for a pharmacy-related research project.
IO Explain how to identify stakeholders who must approve a particular project.
IO Explain the components that make up a budget for a project.
IO Explain strategies for seeking funding for a research project.
IO Explain the role of the IRB in the approval process.

OBJ R8.1.4 (Synthesis) Implement a pharmacy-related research project as specified in its design.
IO Given a particular approved residency project, explain methods for organizing and maintaining project materials and documentation of the project’s ongoing implementation.
IO Explain methods of data analysis.
IO Explain issues surrounding confidentiality of patient information accessed for a research study.

Goal R8.2: Engage in the publication process.

OBJ R8.2.1 (Comprehension) Explain the benefits, to the practitioner and the profession, of contributing to the pharmacy literature.

OBJ R8.2.2 (Synthesis) Write a research article, review, or case report that is suitable for publication.
IO Use a standard style for biomedical journals in the preparation of research articles, reviews, or case reports submitted for publication.
IO Given a specific article, identify appropriate journals to which that article might be submitted for publication.
IO Given an identified topic related to pharmacy practice, appraise the potential to publish an article on that topic.
IO Explain the rules governing who may declare authorship of a given work.

OBJ R8.2.3 (Synthesis) Use correct grammar, punctuation, spelling, style, and formatting conventions to prepare a written summary of a pharmacy-related research project.

OBJ R8.2.4 (Application) Follow the submission requirements of an appropriate peer-reviewed publication to submit a manuscript for publication.

OBJ R8.2.5 (Synthesis) Successfully employ accepted manuscript style to prepare a final report of a pharmacy-related research project.
IO When given a particular residency project ready for presentation, explain the type of manuscript style appropriate to the project and criteria to be met when using that style.

OBJ R8.2.6 (Evaluation) Participate in the peer review of a pharmacy professional’s article submitted for publication or presentation.
IO Explain sources of information on the components of a peer review.
IO Explain the characteristics of an effective peer review.

Goal R8.3: Prepare and deliver an effective poster presentation.

OBJ R.8.3.1 (Synthesis) Design an effective poster for the presentation of a topic.
IO Explain the types of content that should be included in a poster.
IO Explain the rules for visual presentation of poster material.
IO Explain resources that can be used to generate poster materials.

OBJ R8.3.2 (Synthesis) Exercise skill in responding to questions occurring during the presentation of a poster.

OBJ R8.3.3 (Synthesis) Effectively present the results of a pharmacy-related research project.
Elective Educational Outcomes, Goals, and Objectives for Postgraduate Year Two (PGY2) Pharmacy Residencies in Pharmacy Outcomes and Healthcare Analytics

**Outcome E1:** Demonstrate advanced skills in working with a specific technology or automation product (such as Cube Building, Clinical Reminders, etc.).

**Goal E1.1:** Serve as an expert resource for the management of a specific technology or system.

**OBJ E1.1.1** (Synthesis) Formulate effective explanations, geared for a variety of interested audiences, of the functions of the technology system.

- IO Explain the differences in communicating with a technical audience versus a non-technical audience.
- IO Explain communication strategies with information technology vendors.

**OBJ E1.1.2** (Application) Demonstrate the operation of the technology or system.

- IO Explain the user view of the technology or automation system.
- IO Explain the technical view of the technology or automation system.

**Outcome E2:** Utilize added knowledge and skills to enable the application of contemporary quality methodology to the management of pharmacy services.

**Goal E2.1:** Participate in clinical and economic outcomes analyses.

**OBJ E2.1.1** (Comprehension) Explain the principles and methodology of prospective clinical, humanistic, and economic outcomes analysis.

- IO Explain the principles and methodology of basic pharmacoeconomic analyses.
- IO Explain the purpose of a prospective clinical, humanistic or economic outcomes analysis.
- IO Explain study designs appropriate for a prospective clinical, humanistic and economic outcomes analysis.
- IO Explain the technique and application of modeling.
- IO Explain the types of data that must be collected in a prospective clinical, humanistic and economic outcomes analysis.
- IO Explain possible reliable sources of data for a clinical, humanistic and economic outcomes analysis.
- IO Explain methods for analyzing data in a prospective clinical, humanistic and economic outcomes analysis.
- IO Explain how results of a prospective clinical, humanistic and economic outcomes analysis can be applied to internal business decisions and modifications to a customer’s formulary or benefit design.

**OBJ E2.1.2** (Comprehension) Explain the principles and methodology of retrospective clinical, humanistic, and economic outcomes analysis.

- IO Explain the purpose of a retrospective clinical, humanistic or economic outcomes analysis.
- IO Explain study designs appropriate for a retrospective clinical, humanistic and economic outcomes analysis.
- IO Explain the types of data that must be collected in a retrospective clinical, humanistic and economic outcomes analysis.
- IO Explain the content and utilization of reports and audits produced by the pharmacy department.
- IO Explain possible reliable sources of data for a retrospective clinical, humanistic and economic outcomes analysis.
- IO Explain methods for analyzing data in a retrospective clinical, humanistic and economic outcomes analysis.
- IO Explain the impact of limitations of retrospective data on the interpretation of results.
IO Explain how results of a retrospective clinical, humanistic and economic outcomes analysis can be applied to internal business decisions and modifications to a customer's formulary or benefit design.

OBJ E2.1.3: (Evaluation) Contribute to a retrospective clinical or economic outcomes analysis.

**Outcome E3: Demonstrate skills required to function in an academic setting.**

**Goal E3.1:** Understand faculty roles and responsibilities.

**OBJ E3.1.1 (Comprehension) Explain variations in the expectations of different colleges/schools of pharmacy for teaching, practice, research, and service.**

IO Discuss how the different missions of public versus private colleges/schools of pharmacy can impact the role of faculty members.

IO Discuss maintaining a balance between teaching, practice, research and service.

IO Discuss the relationships between scholarly activity and teaching, practice, research and service.

**OBJ E3.1.2 (Analysis) Explain the role and influence of faculty in the academic environment.**

IO Explain the responsibilities of faculty in governance structure (e.g. the faculty senate, committee service).

IO Describe the responsibilities of faculty (e.g. curriculum development and committee service) related to teaching, practice, research, and service roles.

**OBJ E3.1.3 (Comprehension) Describe the types and ranks of faculty appointments.**

IO Explain the various types of appointments (e.g. non-tenure, tenure-track, and tenured faculty).

IO Differentiate among the various ranks of faculty (e.g. instructor, assistant professor, associate professor, full professor).

IO Discuss the role and implications of part-time and adjunct faculty as schools continue to expand and faculty shortages occur.

**OBJ E3.1.4 (Comprehension) Discuss the promotion and tenure process for each type of appointment.**

IO Identify the types of activities that are considered in the promotion process.

IO Identify the types of activities that are considered for tenure.

**OBJ E3.1.5 (Application) Identify resources available to help develop academic skills.**

IO Explain the role of academic-related professional organizations (e.g. AACP) in faculty professional development.

IO Identify resources to help develop teaching skills and a teaching philosophy.

**OBJ E3.1.6 (Comprehension) Explain the characteristics of a typical affiliation agreement between a college of pharmacy and a practice site (e.g., health system, hospital, clinic, retail pharmacy).**

IO Explain how the political environments of either a college or a practice site may affect the other.

**Goal E3.2 Exercise teaching skills essential to pharmacy faculty.**

**OBJ E3.2.1 (Synthesis) Develop an instructional design for a class session, module, or course.**

IO Construct a student-centered syllabus.

IO Construct educational objectives for a class session, module, or course that is appropriate to the audience.

IO Identify appropriate instructional strategies for the class session, module, or course to achieve the objectives.

IO Consider assessment tools that measure student achievement of the educational objectives.

**OBJ E3.2.2 (Synthesis) Prepare and deliver didactic instruction on a topic relevant to the specialized area of pharmacy residency training.**

IO Identify educational technology that could be used for a class session, module, or course (e.g., streaming media, course management software, audience response systems).

IO Create instructional materials appropriate for the topic and audience.

IO Identify strategies to deal with difficult learners.
IO Given feedback from teaching evaluations (e.g. student and or peer), devise a plan to incorporate improvements in future instruction.

OBJ E3.2.3 (Application) Develop and deliver cases for workshops and exercises for laboratory experiences.
IO Identify the appropriate level of case-based teachings for small group instruction.
IO Identify appropriate exercises for laboratory experiences.
IO Provide appropriate and timely feedback to improve performance.

OBJ E3.2.4 (Application) Serve as a preceptor or co-preceptor utilizing the four roles employed in practice-based teaching (direct instruction, modeling, coaching and facilitation).
IO Assess the learner’s skill level to determine the appropriate preceptor strategy for providing practice-based teaching.
IO Given performance-based criteria, identify ways to provide constructive feedback to learners.
IO Develop strategies to promote professional behavior.
IO Identify strategies to deal with difficult learners in the practice setting.
IO Given a diverse learner population, identify strategies to interact with all groups with equity and respect.

OBJ E3.2.5 (Analysis) Develop a teaching experience for a practice setting (e.g., introductory or advanced pharmacy experience).
IO Create educational goals and objectives to be achieved.
IO Develop activities that will allow achievement of identified educational goals and objectives.
IO Identify how and when feedback should be provided.
IO Identify other preceptors for the experience, if appropriate.
IO Determine training that might be needed for the preceptors to deliver student education.
IO Identify potential challenges of precepting and providing patient care services simultaneously.

OBJ E3.2.6 (Synthesis) Design an assessment strategy that appropriately measures the specified educational objectives for the class session, module, course, or rotation.
IO Identify appropriate techniques for assessing learning outcomes in various educational settings [e.g., written examinations, oral examinations, practical examinations, Objective Structured Clinical Examination (OSCE)].
IO Develop examination questions to assess the knowledge, skills, attitudes and behaviors that are appropriate to the learner’s level and topic.
IO Discuss the various methods for administering examination questions (e.g., computerized testing, paper testing).

OBJ E3.2.7 (Evaluation) Create a teaching portfolio.
IO Define the concept of a teaching portfolio and describe its primary purpose
IO Outline the steps in building a teaching portfolio.
IO Develop a personal teaching philosophy to guide one’s teaching efforts and facilitate student learning.

OBJ E3.2.8 (Evaluation) Compare and contrast methods to prevent and respond to academic and profession dishonesty.
IO Evaluate physical and attitudinal methods to prevent academic dishonesty.
IO Discuss methods of responding to incidents of academic dishonesty.
IO Discuss the role of academic honor committees in cases of academic dishonesty.
IO Identify examples and methods to address unprofessional behavior in learners.

OBJ E3.2.9 (Comprehension) Explain the relevance of copyright laws to developing teaching materials.
IO Discuss copyright regulations as related to reproducing materials for teaching purposes.
IO Discuss copyright regulations as related to linking and citing on-line materials.
Appendix

The resident will explain signs and symptoms, epidemiology, risk factors, pathogenesis, natural history of disease, pathophysiology, clinical course, etiology, and treatment of diseases and conditions listed below. The resident will also have experience managing patients with these diseases and conditions.

The resident will explain the mechanism of action, pharmacokinetics, pharmacodynamics, pharmacogenomics, pharmacoeconomics, usual regimen (dose, schedule, form, route, and method of administration), indications, contraindications, interactions, adverse reactions, and therapeutics of medications and non-traditional therapies, where relevant, that are applicable to the diseases and conditions listed below.

The resident will explain various forms of non-medication therapy, including life-style modification and the use of devices for disease prevention and treatment, for diseases and conditions listed below.

Through Taskforces, Committees, Workgroups, and Interdisciplinary Teams as well as during the Population Management longitudinal rotation.

1) Oncology
   A. Prostate Cancer
   B. Renal Cell Carcinoma

2) Chronic Pain Management

3) Infectious Diseases
   A. Hepatitis C
   B. Antimicrobial Stewardship

4) Anticoagulation
   A. Atrial Fibrillation
   B. DVT, PE, other embolic events

5) Mental Health
   A. PTSD
   B. Schizophrenia
   C. Alcoholism
   D. Substance addiction/abuse

6) Miscellaneous
   A. As relevant to current issues and current discussion within the PBM.
   B. As required for updating drug use criteria, protocols, proposals, or other miscellaneous policies
APPENDIX VI: Journal Club/Literature Evaluation

1. **Reason for doing a journal club.**
   a. To encourage the student to keep up with the literature.
   b. To teach the student to analyze the validity of an article and not to just accept it as fact.

2. **Choosing an article: Explain why you chose this article.**
   a. Original article (not a review article) from a reputable journal.
   b. Human studies.
   c. It is preferable to choose an article published within the last 4 months.
   d. Subject that could impact your practice or be of special interest to you.
   e. Who sponsored the article.
   f. A study should contain: Title, abstract, introduction, methods, results and discussion.

3. **Analyzing an article.**
   a. Validity of an article: How precisely and accurately was the outcome measured.
      - **Internal Validity:** How well the study was done. Can the results stand up to scrutiny? Were the patients equal throughout the study? Were the means of measuring the outcome the same throughout the study? Was there bias?
      - **External Validity:** Can the results of the study be extrapolated to patients outside the study?
   b. Study design: To answer a hypothesis.
      May vary depending upon cost, time, sample, size, disease state, outcomes measured, etc.
      Should anticipate, eliminate or minimize any potential sources of **bias**. Bias is a systematic error that enters a study through study design and distorts the data obtained.
      Strategies to minimize bias:
      - Double blinded study > Single Blinded > Open label
      - Placebo controlled
      - Randomization
      - Prospective > Retrospective
   Reader bias:
   - Over critical evaluation of the study
   - Reader has preconceived idea of what the results of the study should demonstrate
   - Draw your own conclusion as to whether the study answered the hypothesis before reading

4. **Handout (Provide a one page handout and the first page of the article)**
   - Objectives of the article
   - Pertinent points of the article
   - Patient population
   - Study design
   - Results of the study
   - Presenters critique of the article

5. **Presentation:** Should run about 15-30 minutes and include the following in the same order:
   - Explain why you chose the article
   - Briefly discuss the type and results of the study.
   - Critique the article: Do you agree with the study design. Does it have internal and external validity? Was there study bias?
APPENDIX VII: Initial Self-Evaluation

VA Sierra Pacific Network (VISN 21)
Pharmacy Outcomes & Healthcare Analytics Resident
Initial Achievement Plan & Self-Evaluation
Program Planning Form

2019-2020

Name of Resident: ___________________, Pharm.D.       Type of Residency: Pharmacy Outcomes & Healthcare Analytics

In order to design a program that will best meet a resident’s needs and interests, each Resident is asked to complete an individual initial evaluation for Program Individualization. Please complete this form and return to the VISN 21 PBM staff. This information will be used to assess your current strengths, areas where you would like to gain experience, and your professional goals to guide in the planning of your residency experiences for the upcoming year.

Career Goal Setting:

What are your immediate goals? Ideally, what would you like to do after completing your residency? Describe the type of professional practice and setting in which you would like to be.

____________________________________________________________

Describe how you think your practice will change over the next five years.

____________________________________________________________

What are your long-range career goals?

____________________________________________________________

Professional Goal Setting:

What immediate goals do you want to accomplish during your residency as they relate to the following items. Please identify any specific skills or training you may want to receive during your upcoming residency.

Clinical training:

____________________________________________________________

Teaching Skills:

____________________________________________________________
Research Skills:

Other:

Pharmacy Practice Experience Inventory:

As part of our assessment of your previous pharmacy practice experiences (including internships, externships, clerkships, residency etc.), please describe your practice experiences and proficiency in the following areas:

Acute care (hospital experiences and activities performed; include supervisory activities, working with directors or supervisors of pharmacy services, etc.):

Ambulatory care (outpatient or community pharmacy experiences and activities):

Drug Information/DUE/Drug Policy Development (regardless of setting, whether inpatient or outpatient; also describe your experiences in providing drug information, whether formal or informal):

Pharmacy Practice Management (orientation and familiarity with pharmacy operations, ordering systems, inventory control, pharmacy computer systems, etc., whether inpatient or outpatient):

Pharmacy Practice Experience Inventory (continued):

After reflecting on your Pharm.D. student clerkships, internships, clinical and previous resident experiences please rank yourself as competent and confident using a scale of 1 (not competent or confident at all) to 5 (very competent and confident).

Internal medicine

Surgery/TPN

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Considering the areas listed above, what suggestions would you have to tailor your experiences during the residency to improve your competency and confidence?

### Residency Elective Experience Preferences:
The following are possible areas where a resident can participate as elective rotations.

Please indicate your interest in the following areas based on the following scale.

1 = Very Interested, 2 = Moderately Interested, 3 = Indifferent, 4 = Moderately Uninterested, 5 = Very Uninterested

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Mental Health Inpatient</td>
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<tr>
<td>Mental Health Outpatient</td>
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<tr>
<td>Women’s Health (VA + community)</td>
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<tr>
<td>Triage (Emergency Room) Medicine</td>
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<tr>
<td>Diabetes Care</td>
<td></td>
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<tr>
<td>Pediatrics (Community Rotation)</td>
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<tr>
<td>Didactic Experience (e.g. P’Econ, Pharmacoepidemiology, statistics, etc.)</td>
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<tr>
<td>Advanced ICU Experience</td>
<td></td>
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<tr>
<td>Advanced Medicine Experience</td>
<td></td>
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<tr>
<td>Advanced Data Management</td>
<td></td>
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<tr>
<td>ID/HIV</td>
<td></td>
</tr>
<tr>
<td>Advanced Ambulatory Care Experience</td>
<td></td>
</tr>
<tr>
<td>VA Community Based Outpatient Clinic (CBOC)</td>
<td></td>
</tr>
<tr>
<td>Other (please define):</td>
<td></td>
</tr>
<tr>
<td>Other (please define):</td>
<td></td>
</tr>
</tbody>
</table>
Please identify the type of activities that you would like to participate in during any ambulatory care experiences. Describe the type of skills you would like to develop. (Please include P’Econ in this assessment)

**Personal and Clinical Strengths & Weaknesses:**

At this point in time, what *clinical* strengths do you feel that you have?  

What *clinical* strengths do you wish to develop during the Residency year?  

What *clinical* weaknesses do you feel that you have?  

How would you like preceptors to help you improve your *clinical* strengths and weaknesses?  

At this point in time, what *personality* strengths do you feel that you have?  

Please list three *personality* strengths that you would like to develop during the Residency Year.  

What *personality* weaknesses do you feel that you have?  

How would you like preceptors to help you improve your *personality* strengths and weaknesses?  

**Understanding of Pharmaceutical Care:**
How do you design, recommend, monitor, and evaluate an individual patient’s pharmacotherapy? (Discuss your process and what you believe are the important aspects of each step).

Other:

Other comments and suggestions/preferences for your residency. Please include any time off requests for special events (weddings, family events, etc.) that you may need during the upcoming year.

***Residents please do not write below this line***

<table>
<thead>
<tr>
<th>Comments from Residency Director:</th>
</tr>
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<tbody>
<tr>
<td>This above information will be used to create an individualized plan for your residency training. This plan will then be reviewed and updated each Quarter during your training.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PGY2 Initial Individualized Resident Plan:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Interests to Address Professional and Career Goals:</td>
</tr>
<tr>
<td>Pharmacy Practice Experience Inventory: (additional clinical practice experiences requested)</td>
</tr>
<tr>
<td>Residency Elective Experience Preferences:</td>
</tr>
<tr>
<td>Specific Projects to Address the Resident’s Strengths and Weaknesses:</td>
</tr>
<tr>
<td>Research Interests/Teaching/Didactic Goals:</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

**Additional Individualized Training Plans** (include added goals and objectives and plan for evaluation):
Projects currently planned to meet goals and objectives for the first Quarter include:
1. Formulary Management
2. P’Econ/Outcomes
3. Service/Policy Development  
4. Data Management  
5. Practice and Practice Foundation  

This Resident Assessment and Program Planning document was discussed with the undersigned resident.

<table>
<thead>
<tr>
<th>Resident's Signature</th>
<th>Date</th>
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<thead>
<tr>
<th>Scott Mambourg, Pharm.D., BCPS, AAHIVP Residency Program Director</th>
<th>Date</th>
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</table>
APPENDIX VIII: Resident Quarterly Self-Evaluation

Resident Name:
Date:

Included below is a list of questions for you to utilize as a guide for your self-evaluations. Please refer to your Initial Self-Evaluation when answering these questions.

I. Goals to accomplish during the PGY-2 Residency Year

1. Based on the Goals accomplished thus far in the residency program?
   a. Do you feel you have accomplished these goals to the best of your ability? If not, what can be done to help you further achieve these goals?

2. Identify those goals, which you have yet to accomplish. Have projects been identified to accomplish these remaining goals?

3. Are any of those goals you identified previously no longer applicable?

4. What goals would you like to add at this time?

II. Current Interests of Clinical Pharmacy Practice

1. What are your primary interests at this time?

2. What has confirmed your interest in these areas, or what experiences have contributed to your decision to change your focus?

3. Have you decided how you would like to complete you elective rotations?

III. Strengths and Weaknesses

1. How have you utilized your strengths during the residency?

2. What experiences have occurred or feedback have you received, which have confirmed your strengths?

3. What additional strengths have you acquired during the residency?

4. How have you strived to overcome your weaknesses?
5. Were any weaknesses uncovered during the residency experience, which you were not previously aware of?

IV. Methods to Help Overcome Areas of Weakness

1. How have your preceptors helped you with the weaknesses you listed?

2. What aspects of the residency helped you with the weaknesses you listed?

3. How could the residency have been improved or what could your preceptors have done to help you overcome these areas of weakness?

V. Personal Preferences and Strategies

1. What Suggestions would you have to tailor your experiences during the residency to improve your competency and confidence?

2. Describe the frequency and type of preceptor interaction you feel to be ideal. Where do you see the preceptor fitting into your professional development and maturity?
Outgoing residents: I would like to request your feedback about the residency. I appreciate if you would take a few minutes and complete the following survey. I want your honest feedback and I am trying to identify areas of improvement.

Please fill out electronically, print and sign. You can give to me in hardcopy or have scanned into PDF and e-mailed. If you have any questions, please see me or call me at 775-326-5724

1. What did you like the best about this residency program? What did you like the least?

2. What specific skill did you improve/learn in this residency program that will help you in the future?

3. What experience and or skill would you have liked (that you did not get) in the residency program?

4. If you could change one or two aspects of the residency program what would it (they) be?

5. If you had to do the residency again, would you choose this one again?

6. Do you have specific comments (positive and/or negative about specific rotations?)

7. Do you have specific comments (positive and/or negative about specific preceptors?)

8. Do you have specific comments (positive and/or negative about the RPD?)

9. Any other final comments?

Name:__________________________________ Date: __________________
APPENDIX X: Functional Statement

Position Title: PGY-2 Pharmacy Outcomes & Healthcare Analytics Resident

General Program Description:
The role of the pharmacy resident is to develop into clinically competent pharmacists capable of managing small and large populations of patients, primarily through longitudinal experiences in data management, pharmacoeconomics, and health outcomes. The PGY2 resident provides specialized support to promote the integration of information technology, informatics, and data analysis with the practice of evidence-based medicine and medical treatments for VISN 21 PBM projects.

Residents are under the general supervision of the residency director, and under the preceptorship of the residency director and other assigned personnel. Under such oversight, the resident will design computerized reports and interfaces for various demographics; will demonstrate project development, implementation, and management skills; will initiate and implement clinical programs to enhance the efficiency of patient care; will monitor the local Veterans Integrated Service Network (VISN) performance measures and metrics; will provide education to health care professionals and participate in clinical research.

Functions:

1. Clinical and population management
   a. Demonstrates professionalism, creativity, and cooperation to work with various VISN 21 PBM task forces, workgroups and committees to improve patient care through various projects.
   b. Evaluates drug related problems, designs systematic problem solving routines, assist in therapeutic selection, monitoring and evaluation of therapy.
   c. Clinically manages patients directly or by using dashboard tools to improve patient safety, quality and other outcomes under the supervision of a preceptor.

2. Data management
   a. Initiates, develops, validates, and executes projects in support of the data warehouse.
   b. Provides feedback to clinical staff to improve user interface of data tools.
   c. Demonstrates understanding of the VA health data repository enterprise architecture data warehouse by manipulating the local, regional, and central databases to improve performance measures and metrics, improve efficiency of patient care, and identify at risk patients for VA personnel as appropriate for research and program purposes.

3. Research, Pharmacoeconomics and Health Outcomes
   a. Reviews PBM performance measures/metric, Lost Opportunity Costs (LOC)/PBM contract adherence, and other pharmacoeconomic initiatives.
   b. Applies pharmacoeconomic principles to the VA healthcare environment and in research design and methodologies to improve economic, clinical, and humanistic health outcomes.
   c. Manages and directs outcome projects developed and assigned by the preceptor at the direction of committees, task forces, and informal groups.
   d. Monitors and records both clinical and economic outcomes of programs.
e. Continually monitors new literature, evidence, and pricing changes to improve care and cost-containment.

f. Designs and participates in research studies involving therapy outcomes, pharmacoeconomics, and quality care.

4. Education

a. Precepts other trainees as part of duty responsibilities as assigned.

b. Provides accurate and comprehensive information about drugs and drug use to other health care providers and patients.

c. Participates in in-service education programs to pharmacists, nurses, and other health care professionals.

d. Reviews and presents evaluations of articles in Pharmacy Journal Club as scheduled.

e. Assumes responsibility for self-development in learning about new medications and current changes within the practice of pharmacy.

f. Demonstrates strong interpersonal skills dealing with other health providers and patients.

5. Administration

a. Participates in defining strategic goals, educates clinicians regarding processes related to operations, assists in measurements of those goals, and contributes to PBM and Medical Care Collections Fund (MCCF) success.

b. Demonstrates responsibility and initiative by managing projects in all aspects of VISN formulary.

c. Attends, participates and contributes to decisions of P&T Committees, VISN MUM team and other committees and/or work groups.

d. Participates in various Continuous Quality Improvement (CQI) initiatives, including Drug Use Evaluations (DUEs).

e. Reviews questions/problems dealing with all aspects of pharmacy operations and implements projects to better utilize available resources.


a. Designs, develops, and completes at least one approved research/quality improvement project to evaluate the quality of clinical pharmacy services, other pharmacy service or drug usage, and prescribing practices. Completion includes a manuscript submission.

b. Coordinates targeted physician and pharmacist task forces or project groups to address performance measures, and optimize the cost-effective use of medications and respective concerns.

c. Exercises initiative and collaboration effectively with clinical and administrative staff to meet performance goals and support quality patients care activities.

d. Participates in a longitudinal experience where the resident will gain exposure and contribute to the development and achievement of PBM and pharmacy service goals on the local, VISN, and National levels.

e. Develops and implements VISN-wide targeted programs to achieve performance measures and contract goals in a global and time-efficient manner. Monitors needs of individual sites and guides sites on project implementation.

Qualifications:

1. The resident must be a United States Citizen.

2. Graduate of a degree program in pharmacy from an approved college or university. The degree program must have been approved by the American Council on Pharmaceutical Education
(ACPE), or prior to the establishment of ACPE, have been a member of the American Association of Colleges of Pharmacy (AACP). Verification of approved degree programs may be obtained from the American Council on Pharmaceutical Education, 311 West Superior Street, Suite 512, Chicago, Illinois 60610, Phone (312) 664-3575.

3. **Licensure:** Full, current and unrestricted license to practice pharmacy in a State, Territory, Commonwealth of the United States (i.e., Puerto Rico), or the District of Columbia. The pharmacist must maintain current registration if this is a requirement for maintaining full, current, and unrestricted licensure.

4. Completion of a first-year pharmacy practice residency or an equivalent experience approved by ASHP, 3 years of clinical experience minimum, is required to be considered for this PGY-2 program.


**Additional/Preferred Qualifications:**

A. Meets the age-specific competency as outlined in the "Competency Assessment Plan". Meets the general competencies as outlined in the "Competency Assessment Plan", which includes the following:

3. Knowledge of Medical Center Quality Assurance.
4. Knowledge of the appropriate responses for initiating CPR.
5. Knowledge of the principles of information management.
6. Knowledge of the customer service standards and interpersonal skills.
7. Knowledge and skill to meet the position specific competencies as outlined in the "Competency Assessment Plan".

B. The ability to communicate effectively in consultative roles with physicians, allied health care professionals, and counsel patients on drug therapy is essential to the accomplishment of the pharmacy mission.

C. The resident will review and evaluate medication therapies and recommend viable alternatives to the providers on problems concerned with drug regimens. The difficulty and complexity of the resident’s responsibilities are compounded by personal contacts with an ambulatory patient population who are (a) usually severely handicapped and/or mentally/physically ill or (b) arbor/manifest attitudes of depression, resentment or anger which may present emotional/physical stress factors. It is requisite that courtesy, tact, discretion, resourcefulness, initiative and a sympathetic understanding of the patient’s manifested behavior are exercised at all times.

**Supervisory Controls:**

The resident serves with considerable independence in all areas of pharmacy activity under the general supervision of the Residency Director. The resident reports to and keeps the Clinical Pharmacy Specialist Preceptor apprised of trends/problems affecting any aspects of the activity, also, recognizing the need for changes in policy and procedures and makes viable recommendations.

**Customer Service:**

A. Relationships with supervisors, co-workers and others within the organization must be consistently courteous and cooperative in nature and overall contribute to the effective
operation of the office. Performance must demonstrate the ability to adjust to change or work pressure in a pleasant manner; handle differences of opinion in a businesslike fashion; follow instructions conscientiously; and function as a team member, helping the group effort where possible.

B. Interacts with a wide variety of staff and demonstrates sensitivity to and an understanding of their needs by taking ownership of the problem and adopting the customer’s needs as their own.

C. Provides professional and technical advice, support and assistance to all customers with a view towards accomplishing the service mission (i.e. customer service). Personal interactions will be free of legitimate negative feedback.

D. Customers are treated in a professional manner, with tact, courtesy and respect. Instills confidence and trust with supervisors, peers and subordinates by providing timely and quality service. Meets established time frames and deadlines in area of responsibility.

Age Related Competency:
A. The resident demonstrates the skills and knowledge necessary to provide care appropriate to the adult and geriatric patients served, including the ability to obtain and interpret information to identify patient needs to provide the care needed.

B. Demonstrates the ability to work with a variety of diagnosis and ages meeting the special needs of the following age groups as stated on the "Competency Assessment Plan”:
   1. Young Adulthood: 18-39 Years Old
   2. Middle Adulthood: 40-64 Years Old
   3. Older Adult: 65-80 Years Old
   4. Geriatric: 80+ Years Old

Drug Testing Position:
In accordance with criteria contained in Executive Order 12564, this position has been determined as “sensitive” for drug testing purposes. VA employees in positions involving law enforcement, national security, the protection of life and property, public health or safety, or other functions requiring a high degree of trust and confidence, will be designated as subject to drug testing.

Occupational Safety and Health:
A. Follow safe work practices and procedures, including use of required personal protective equipment (PPE).

B. Recognize and report unsafe or unhealthy conditions/practices to supervisory personnel.

C. Report work-related injuries or illness to supervisory personnel.

ADP Security:
In the performance of official duties, the employee has regular access to printed and electronic files containing sensitive information, which must be protected under the provisions of the Privacy Act of 1974, Health Insurance Portability and Accountability Act (HIPAA) of 1996, and other applicable law and regulations. The employee is responsible for (1) protecting that information from unauthorized release or from loss, alteration, or unauthorized deletion and (2) following applicable
regulations and instructions regarding access to computerized files, release of access codes, etc. as set out in a computer access agreement which the employee signs.

**Language Proficiency:**
The resident in this position has direct patient care duties and must be proficient in the English language.

**Duties:**
1. Abide by the bylaws, rules, and regulations of this Medical Center which apply to activities as a member of the professional staff
2. Abide by the professional standards established by the American Society of Hospital Pharmacists and the policies and procedures of this Medical Center and the Department of Veterans Affairs
3. In the performance of official duties, the employee has regular access to both printed and electronic information containing sensitive data which must be protected under the provisions of the Privacy Act of 1974 and other applicable laws, federal regulations, VA statutes and policies, and VHA policy. The employee is responsible for (1) protecting that data from unauthorized release or from loss, alteration or unauthorized deletion and (2) following applicable regulations and instructions regarding access to computerized files, release of access codes, etc., as set out in a "Rules of Behavior" signed by each employee.
4. The resident is required to obtain a pharmacist license as defined by the Department of Veterans Affairs and the Erie VAMC Residency Manual.
5. Meet the requirements of the ASHP Accreditation Standard for post graduate year 1 (PGY2) pharmacy residency program

I have read and received a copy of this Functional Statement. I understand that I am responsible for the contents within.

Employee Signature: _______________________________ Date: _________

Supervisor Signature: _______________________________ Date: _________
APPENDIX XI: VA National Formulary FAQ

1) Q: Where can I find detailed information about the VA National Formulary Management Process?

2) Q: What is the purpose of the VA National Formulary (VANF)?
   A: The purpose of the VANF is to provide high quality, best value pharmaceutical products while assuring the portability and standardization of the pharmacy benefit to eligible veterans accepted by VA for care.

3) Q: Why aren’t strengths listed on the VA National Formulary (VANF)?
   A: The VANF is dosage form specific to allow flexibility at VISN/facility level.

4) Q: Why can’t I locate a brand name product on the VA National Formulary?
   A: Items are listed by generic name and VA class. In some cases the brand name drug is included in parentheses for standardization or as an example for complicated generic name combinations.

5) Q: What is the VA Class?
   A: It is a therapeutic classification system to help identify similar products.

6) Q: What does "R" mean by antibiotics?
   A: This is defined in the heading of the VA National Formulary and states: “The national restriction for antibiotics is that all decisions regarding which agents to carry in these classes will be made at the local or VISN level. These decisions should be based on local culture and sensitivity patterns.”

7) Q: Where can I find VA clinical guidance (e.g., Criteria for Use, Drug Class Reviews, and Drug Monographs)?
   A: Refer to the PBM Webpage at https://vaww.cmopnational.va.gov/cmop/PBM/default.aspx under “Clinical Guidance”.

8) Q: Can agents be added on the VISN/local level?
   A: No. The VANF is the sole drug formulary used in VA. (Reference: VHA Handbook 1108.08, paragraph 17. a.)

9) Q: How do I know if a drug is on a National Contract or other special contract?

10) Q: Can agents listed on the VA National Formulary (VANF) be deleted on the VISN/facility level?
A: No. The VANF is a listing of products (drugs and supplies) that must be available for prescription at all VA facilities, and cannot be made non-formulary by a VISN or individual medical center. (Reference: VHA Handbook 1108.08, paragraph 3. q.)

11) Q: How do I know if an item is on the VA National Formulary (VANF)?
A: Items are listed by generic name or VA class on the PBM Webpage at https://vaww.cmopnational.va.gov/cmop/PBM/default.aspx under “National Formulary”.

12) Q: How is the VA National Formulary (VANF) updated?
A: The VANF is updated by the PBM after changes are made from Medical Advisory Panel/VISN Pharmacist Executives (MAP/VPE) meetings.

13) Q: Where can I obtain a current copy or changes previously made to the VA National Formulary?

14) Q: How is an item added to the VA National Formulary (VANF)?
A: Requests for change in VANF status may be submitted to the PBM by a VISN Formulary Committee, the VFL Committee, the MAP, a VHA Chief Medical Consultant, or VHA Chief Medical Officer. **NOTE**: An individual or group of physicians may submit a request for VANF addition through their VISN Formulary Committee(s).

1. All requests for change in VANF status must contain:
   a. Minutes of the VFL Committee or other acknowledged meeting in which action was taken on the product (if applicable).
   b. Literature citations that support the recommendation.

2. All requests for addition to the VANF must contain:
   a. Criteria for drug use that addresses indications, monitoring, and any efficacy or safety outcomes specific to the Veteran population;
   b. Completion of VA Form 10-0450, VHA National Formulary Request for Formulary Review;
   c. Completion of VA Form 10-0451, Conflict of Interest Disclosure Form, by the parties presenting the drug for formulary addition; and
   d. The signature of the VISN Pharmacist Executive, VHA Chief Medical Consultant, or Chief Medical Officer.

(Reference: VHA Handbook 1108.08, paragraph 17. l.)

15) Q: What is the non-formulary use procedure?
A: A non-formulary request process must exist at each VA facility. The process should assure that decisions are evidence-based and timely. Non-formulary products may be approved under the following circumstances:

1. Contraindication(s) to the formulary agent(s).
2. Adverse reaction to the formulary agent(s).
3. Therapeutic failure of formulary alternatives.
4. No formulary alternative exists.
5. The patient has previously responded to a non-formulary agent and risk is associated with a change to a formulary agent. (Reference: VHA Handbook 1108.08, paragraph 17. q.)

16) Q: Can I use a non-formulary agent if I am involved in a clinical trial?
   A: Yes. Drugs and supplies are not added to the VANF solely for the purpose of performing a clinical trial; however, the VANF is not intended to impede the use of any pharmaceutical agent in legitimate scientific studies. (Reference: VHA Handbook 1108.08, paragraph 17)

17) Q: How was the original National Formulary compiled?
   A: By combining the VISN formularies for matches, and then field review for comment, and selection.

18) Q: When was the original VA National Formulary published?

19) Q: How will drug classes be reviewed?
   A: The PBM will determine which drug therapeutic classes will be reviewed in preparation of awarding national contracts or as needed based on scientific evidence or safety concerns. Requests for drug or drug class reviews may be submitted to the PBM by a VISN Formulary Committee, the VPE Committee, the MAP, VHA Chief Medical Consultants, or VHA Chief Medical Officers. (Reference: VHA Handbook 1108.08, paragraph 17. k.)

20) Q: What is the function of the VISN formulary committee?
   A: The VISN Formulary Committee’s function is to provide clinical oversight and guidance for the formulary review process; coordinate VANF initiatives at the VISN and facility levels; and communicate VISN-specific submissions to the PBM and MAP for consideration as part of the VANF process. (Reference: VHA Handbook 1108.08, paragraphs 3. t. and 10)

21) Q: Can the VISN or facility level restrict National Formulary agents?
   A: VISNs are not permitted to modify PBM-MAP Criteria for Use documents; however, restrictions to prescribing can be established for VANF items that require close monitoring to ensure appropriate use. For example, in the case of anti-infective, facility level restrictions intended to prevent resistance are permissible. Restrictions may include evidence-based guidelines or prescribing privileges for providers with specific expertise. Restrictions are not to be based solely on economics, nor are they to be so limiting as to prevent patients with legitimate medical needs from receiving these medications and supplies. (Reference: VHA Handbook 1108.08, paragraphs 17. b. and 17. aa.)

22) Q: Where can I look up drug prices?
APPENDIX XII: Web Sites Used by Past Residents

1. Drug information site provided by the VA:
   http://vaww.reno.va.gov/pharmacy_service/Drug_Information.asp
   This address links into the intranet drug information site that the VA has. This page will give you access to Facts and Comparisons, Up-to-date, Micromedex, GlobalRPH and a few more.

   This address has links to important areas that you will need to get to during the residency. Here is a list of a few items on the site: National Formulary link, National PBM website, VISN 21 Drug Use Criteria, Treatment Algorithms, VISN 21 Shared Drive, VISN 21 PBM Clinical Performance Dashboard, VISN 21 PBM Workgroup Committee Minutes/Agendas, VISN 21 MUM Team Minutes/Agendas.

   This address has links to important national documents. Here is a list of a few documents: Criteria For Use, Drug Class Reviews, Drug Monographs, Patient and Provider Letters and much more. Future residents should become familiar with this site.

   This site is used to confirm travel plans that are work related.

5. McKesson:
   https://connect.mckesson.com/portal/site/smo/template.LOGIN/?cid=SMODecom2
   Use this to look up cost data and run reports. Ask Diana for the access code when needed. If unfamiliar with McKesson ask Diana Higgins for a tutorial.

6. VISN 21 Clinical Performance Dashboard:
   http://vaww.dwh.r01.portal.va.gov/VISN%2021/Pages/default.aspx
   The dashboard is used for HEDIS measures, VISN 21 measures and monitors and National LOCs. It is always being worked on for new ideas and is a wealth of information. Future residents should become very familiar with the dashboard.

7. PharmAcademic: https://www.pharmacademic.com/
   The resident will be using this site for evaluations, which is required by ASHP

8. VA Talent Management System (aka TMS):
   https://www.tms.va.gov/plateau/user/login.jsp
   The resident will have to complete certain task on the LMS during the residency that are required by the VA.

9. Pharmacoeconomic Data Management:
   http://vaww.national.cmop.va.gov/pre/PharmacoEconomic/default.aspx
   This is a share point site used by the national PBM. It consists of national documents from national and different VISN on “Cost savings and Clinical Initiatives”.

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    Health Services Research & Development Service (HSR&D):
    http://www.hsrd.research.va.gov/
    Both of these sites have lecture series on many different topics in research.

    This site will be used to register for Mid-Year.


13. Xerox Printer Address:  http://10.172.78.223/


15. CDW Metadata:  http://vaww.cdw.va.gov/metadata/default.aspx


17. VISN 21 research SharePoint:  http://vaww.visn21.portal.va.gov/sierranevada/research


19. Update contact information in Outlook:  \hasfcapps\apps\galm\galm32.exe
APPENDIX XII: OAA Mandatory Trainee Orientation

Please contact the program director for access to documents outlining Mandatory Training and VHA Handbook 6500.
APPENDIX XIV: Scope of Practice

What is a Scope of Practice or Collaborative Practice Agreement?

Clinical pharmacy specialists may have a range of practice privileges that vary with their level of authority and responsibility. The specific practice should be defined within a scope of practice document or protocol developed by the health care institution. This protocol should define the activities that pharmacists will provide within the context of collaborative practice as a member of the interdisciplinary team, as well as any limitations that may be needed. Quality of care review procedures and processes to assure professional competency should also be included in the scope of practice.

At VASNHCS, all clinical staff (excluding physicians) that prescribes treatment in the medical record (dietitians, nurses, pharmacists, podiatrists, physician assistants, social workers, physical therapists, audiologists, speech/language pathologists and respiratory therapists) will function under a scope of practice approved by the Chief of Staff. Pharmacy Service has a peer review committee to assure high quality care is provided and that clinical pharmacy specialists are qualified to perform under their scope of practice.

In order to be granted prescriptive authority, clinical pharmacy specialists must possess:

1. A current state license, and
2. A Pharm.D. or M.S. degree (or equivalent). Example equivalent qualifications include (but not limited to):
   a. Completion of an American Society of Hospital Pharmacists accredited residency program,
   b. Specialty board certification, or
   c. Two years of clinical experience.

VASNHCS Pharmacy Service has clinical pharmacists practicing in a wide variety of clinical settings and has various protocols in place to cover these activities.

What is a pharmacist/resident WITHOUT a Scope of Practice ALLOWED to do?

Upon receiving a pharmacist’s license, a resident can perform any function typically performed by a pharmacist such as processing prescriptions written by providers, pulling refills, discontinuing medications, limited partial prescriptions, providing patient education, and documenting patient allergies. All activities must be accomplished within the guidelines, policies and procedures set forth by the hospital and Pharmacy and Therapeutics Committee. Residents will document their activities in the patient medical record with a progress note that will need to be cosigned by the preceptor.

What is a pharmacist/resident WITHOUT a Scope of Practice PROHIBITED from doing?

A Scope of Practice is required for writing (most prescriptions at the VA are electronically entered not written) or renewing prescriptions and ordering labs. A pharmacy resident may perform these functions under the supervision of their rotation preceptor but must be cosigned. Progress notes that document these activities must be electronically cosigned by the supervising pharmacist on a timely basis. This may be accomplished by the addition of a cosigner or additional signer to the note.

Note: prescriptions for antineoplastic agents and controlled substances (i.e. narcotics, benzodiazepines) are excluded and shall not be written by pharmacists.

References:

1. CAVHS Memorandum No. 11-48
2. VHA Directive 2008-043
3. VHA Handbook 1400.04
APPENDIX XV: Certificate Requirements Contract

I understand that I have not completed all requirements for my PGY-2 pharmacy residency because my manuscript for my project is not suitable for publication at this time and my ________________ project and ________________ are not yet acceptable. I plan to complete these as soon as possible.

I understand that I will be given an extension to give me an opportunity to submit suitable documents as noted above and receive my residency certificate. Although an extension is not required, my program director has agreed to work with me in the hope that I will be able to receive my certificate.

I will actively pursue revising the noted assignments. I will submit revisions no less than weekly beginning July 1, 20__. Revisions will address all the comments that have been provided and continue to move toward satisfactory completion of the noted assignments.

I understand that the last day for assignments to be received will be July 31, 20__. If I do not submit revisions as noted above and/or have not submitted a manuscript suitable for publication along with the other noted assignments by July 31, 20__, I will not receive my residency certificate for my PGY1 residency. This date was established to give me additional time, but also to complete the requirements for my PGY1 residency program so it does not interfere with my future professional responsibilities and does not interfere with preceptor's attention to new residents over a significant period of time.

Resident

Date

Program Director

Date
APPENDIX XVI: Transferring NT Login Procedure

Responsibility of Reno IT Department


INTRA-VISN (Same Domain)
1. Losing or Gaining Site OIT (Tier 2 IT support) needs to submit a Request to the ROC (1-877-746-3895) to move account from Site XXX (Provide Losing site, IE: User is moving from Las Vegas (LAS)) to gaining Site xxx(San Diego, SDC). Tier 2 IT support should note what security or distribution groups from losing site are no longer needed for the user account in question. This needs to be communicated to the ROC, so that it gets noted on the CA Request for R01 Domain Infrastructure Team to perform (Tier 2 of gaining site has reported problems with deleting these groups assigned from losing site). NOTE: Do not create a new domain account or new email account (User’s can logon to their old account as long as it hasn’t been disabled at the new site)
2. Ask the ROC to assign it to the Region 1 Domain Infrastructure Division
3. Region 1 Domain Infrastructure Division will move the account from the Losing Site’s OU to the Gaining Site’s OU and close out the request.
4. The Gaining site will need to rename the account (IE. VHALASxxxx to VHASDCxxxx) after the Request is closed and move the Exchange account to the proper Exchange Server and Storage groups for your site.
5. In the case where a new Domain account and Exchange account are created at the new site. Follow the above steps 1-3 to get the account moved to your Site. Export the user’s mail from the New account to a PST file. Delete New domain & exchange account, only after your Request is closed. Follow step 4 above and reset password if necessary.
Have the user login and import the exported pst file. This will allow the user to continue use of his/her existing PIV cards.

INTER-VISN (Outside your VISN/Different Domain)
1. Losing Site to contact the Gaining site to create a New domain account only.
2. Losing Site to contact National Helpdesk (1-888-596-4357) to request that the mailbox be moved to the New Domain account.
3. National Helpdesk will move mailbox and close ticket.
4. However, in cases where the user shows up at the Gaining site and a New domain account and email box are created.
   a. Gaining site contacts National Helpdesk to request mail be merged from old account to New Account (you will need to provide National with the User’s old domain account and email address).
   b. National Helpdesk normally has a 3-5 day turnaround time for the mail to be moved/merged.
APPENDIX XVII: Evaluation Information/Schedules

Evaluation Schedule:

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Preceptor(s)</th>
<th>Start Date</th>
<th>End Date</th>
<th>Type</th>
<th>Evaluator</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Management 1</td>
<td>Joy and Amy</td>
<td>07/01/2019</td>
<td>03/31/2020</td>
<td>Extended</td>
<td>Joy and Amy</td>
<td>End of Rotation</td>
</tr>
<tr>
<td>Data Management 2</td>
<td>Janice, Amy, and Jen</td>
<td>04/01/2020</td>
<td>06/30/2020</td>
<td>Extended</td>
<td>Janice, Amy, and Jen</td>
<td>End of Rotation</td>
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<tr>
<td>Formulary Management</td>
<td>Scott and Janice</td>
<td>07/01/2019</td>
<td>06/30/2020</td>
<td>Longitudinal</td>
<td>Scott and Janice</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Pharmacoeconomics &amp; Health Outcomes (VISN)</td>
<td>Scott and Jen</td>
<td>07/01/2019</td>
<td>06/30/2020</td>
<td>Longitudinal</td>
<td>Scott and Jen</td>
<td>Quarterly</td>
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<tr>
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<td>03/30/2020</td>
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<td>Scott</td>
<td>Quarterly</td>
</tr>
<tr>
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<td>03/31/2019</td>
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<td>Scott and Project Preceptors</td>
<td>Quarterly</td>
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<tr>
<td>Service and Policy Development</td>
<td>Scott and Diana</td>
<td>07/01/2019</td>
<td>06/30/2020</td>
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<td>Diana</td>
<td>Quarterly</td>
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Learning Experiences

<table>
<thead>
<tr>
<th>Outcome/Goal</th>
<th>Emphasis</th>
<th>DATA MANAGEMENT</th>
<th>FORMULARY MANAGEMENT</th>
<th>P'ECON AND OUTCOMES</th>
<th>PHARMACY PRACTICE FOUNDATION</th>
<th>POPULATION MANAGEMENT</th>
<th>RESEARCH PROJECTS</th>
<th>SERVICE AND POLICY</th>
<th>ELECTIVE</th>
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<tbody>
<tr>
<td>Required outcomes and educational goals</td>
<td></td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
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</tr>
</tbody>
</table>

Outcome R1: Demonstrate effective leadership and practice management skills in the areas of administration, analytics, informatics, and outcomes.

Goal R1.1: Exhibit ongoing development of the essential personal skills of a practice leader.
<table>
<thead>
<tr>
<th>Required outcomes and educational goals</th>
<th>Learning Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome/Goal</strong></td>
<td><strong>Emphasis</strong></td>
</tr>
<tr>
<td></td>
<td><strong>DATA MANAGEMENT</strong></td>
</tr>
<tr>
<td><strong>Goal R1.2</strong></td>
<td><strong>Outcome</strong></td>
</tr>
<tr>
<td>Contribute to the leadership and management activities within the pharmacy outcomes and healthcare analytics field by exercising superior communication and political skills.</td>
<td>TE+</td>
</tr>
<tr>
<td><strong>Goal R1.3</strong></td>
<td>Exercise practice leadership.</td>
</tr>
</tbody>
</table>

**Outcome R2: 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.**

| Goal R2.1 | Develop collaborative professional relationships with members of the PBM staff, various health care teams, taskforces, and workgroups. | TE+ | T | TE | T | T | TE | T | TE |
| Goal R2.2 | Lead departmental and/or interdisciplinary teams in the design, implementation, and/or enhancement of the organization’s criteria for medication use, monitoring, and outcomes measurement. | TE+ | TE | TE | T | TE | T | TE |
| Goal R2.3 | Prioritize development of analytic tools that improve and assist clinicians in patient care. | TE | TE | TE | T |
| Goal R2.4 | Assure that all patient-specific, medication-specific, and evidence-based pharmacotherapy information required to support effective medication-related decisions is readily available in a useful format to members of interdisciplinary, patient-centered teams. | TE+ | TE | TE | T |
| Goal R2.5 | Guard the confidentiality and security of health data stored in the health care organization’s database. | TE | TE | T | T |

**Outcome R3: Serve as an authoritative resource on the optimal use and development of analysis tools, formulary management, and pharmacy outcomes.**
### Required outcomes and educational goals

<table>
<thead>
<tr>
<th>Goal R3.1</th>
<th>Establish oneself as an expert for data retrieval, medication information, and outcomes-related resources within the organization.</th>
<th>TE+</th>
<th>TE</th>
<th>TE</th>
<th>TE</th>
<th>T</th>
<th>T</th>
<th>TE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal R3.2</td>
<td>Contribute pharmacist perspective and expertise regarding the development, implementation, utilization, and revision of outcomes measures and metrics, and analysis tools in interactions with information technology staff, PBM staff, clinicians and end users.</td>
<td>TE+</td>
<td>TE</td>
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<tr>
<td>Goal R3.3</td>
<td>Critically evaluate and employ advanced analysis skills to relevant biomedical literature in preparing analysis tools, drug information responses, pharmacoeconomic proposals, and drug use criteria.</td>
<td>TE+</td>
<td>T</td>
<td>TE</td>
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<td>T</td>
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<td>TE</td>
</tr>
<tr>
<td>Goal R3.4</td>
<td>Identify opportunities for improving the safety of aspects of the organization’s medication-use system through analysis tools, measures, metrics, guidelines and policies.</td>
<td>TE+</td>
<td>T</td>
<td>T</td>
<td>TE</td>
<td>T</td>
<td></td>
<td>TE</td>
</tr>
<tr>
<td>Goal R3.5</td>
<td>Assist the organization in achieving compliance with accreditation, legal, regulatory, and safety requirements related to the use of medications (e.g., Joint Commission requirements; ASHP standards, statements, and guidelines; state and federal laws regulating pharmacy practice; OSHA regulations).</td>
<td>TE+</td>
<td>T</td>
<td>T</td>
<td>TE</td>
<td>T</td>
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</tbody>
</table>

**Outcome R4: Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public.**

| Goal R4.1 | Provide effective education and training on pharmacoeconomic proposals, analysis tools/software utilization, academic detailing goals, or general drug therapy topics to health care professionals and health care professionals in training. | TE+ | TE | T | TE | | TE |

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<thead>
<tr>
<th>Outcome/Goal</th>
<th>Emphasis</th>
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<tbody>
<tr>
<td><strong>Required outcomes and educational goals</strong></td>
<td></td>
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<tr>
<td>Goal R4.2 Design and deliver education programs to the public that center on health improvement, wellness, and disease prevention.</td>
<td>TE</td>
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<tr>
<td>Goal R4.3 Design and present Academic Detailing education programs to healthcare providers and patients in order to improve patient outcomes.</td>
<td>TE+ T</td>
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<tr>
<td><strong>Outcome R5: Demonstrate the technical skills essential to the role of a pharmacist specializing in pharmacy outcomes and healthcare analytics.</strong></td>
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<tr>
<td>Goal R5.1 Demonstrate a working knowledge of available technology for prescribing, order processing, distribution/dispensing, monitoring, safe and efficient administration, administration documentation.</td>
<td>TE+ TE TE</td>
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<tr>
<td>Goal R5.2 Demonstrate and apply understanding of basic analytics principles, standards, and best practices.</td>
<td>TE TE T T</td>
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<tr>
<td>Goal R5.3 Execute an original project through the analysis tool life cycle.</td>
<td>TE TE T T</td>
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<tr>
<td><strong>Outcome 6: Understand a pharmacy benefits management structure and contribute to the organization's formulary management.</strong></td>
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<tr>
<td>Goal R6.1 Understand the interrelationship of the pharmacy benefit management function, and the network health care systems.</td>
<td>TE TE T</td>
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<tr>
<td>Goal R6.2 Provide pharmacy expertise to the organization in the area of managed care by contributing to the ongoing development of the organization’s formulary through review of existing, development of new, and implementation of pharmacoeconomic proposals, drug use criteria, and organizational policies and procedures affecting the care of patients.</td>
<td>TE TE T</td>
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<tr>
<td>Goal R6.3 Understand the organization’s process for contracting with pharmaceutical manufacturers.</td>
<td>TE</td>
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<tr>
<td>Goal R7.1 Collect and analyze patient information.</td>
<td>TE+</td>
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<tr>
<td>Goal R7.2 Establish collaborative pharmacist-patient and pharmacist-caregiver relationships.</td>
<td>TE</td>
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<tr>
<td>Goal R7.3 Appropriately triage patients if necessary.</td>
<td>TE</td>
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<tr>
<td>Goal R7.4 Design evidence-based therapeutic regimens.</td>
<td>TE</td>
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<tr>
<td>Goal R7.5 Design evidence-based monitoring plans.</td>
<td>TE+</td>
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<tr>
<td>Goal R7.6 Recommend regimens and monitoring plans.</td>
<td>TE+</td>
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<tr>
<td>Goal R7.7 Design education for a patient’s regimen and monitoring plan.</td>
<td>TE</td>
</tr>
<tr>
<td>Goal R7.8 Implement regimens and monitoring plans.</td>
<td>TE</td>
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<tr>
<td>Goal R7.9 Evaluate patient progress and redesign regimens and monitoring plans.</td>
<td>TE</td>
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<tr>
<td>Goal R7.10 Communicate pertinent patient information to facilitate continuity of care.</td>
<td>TE</td>
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<td>Goal R7.11 Document direct patient-care activities appropriately.</td>
<td>TE</td>
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</table>
### Required outcomes and educational goals

**Outcome R8: Contribute to the body of pharmacotherapy knowledge by conducting outcomes-based research or quality improvement projects with the assistance of analysis tools.**

| Goal R8.1 | Conduct a pharmacy outcomes and/or health analytics-related research or QI project using effective research and project management skills. | TE |
| Goal R8.2 | Engage in the publication process. | TE |
| Goal R8.3 | Prepare and deliver an effective poster presentation. | TE |

### Elective outcomes and educational goals

**Outcome E1: Demonstrate advanced skills in working with a specific technology or automation product (such as Cube Building, Clinical Reminders, etc.).**

| Goal E1.1 | Serve as an expert resource for the management of a specific technology or system. | TE |

**Outcome E2: Utilize added knowledge and skills to enable the application of contemporary quality methodology to the management of pharmacy services.**

| Goal E2.1 | Participate in clinical and economic outcomes analyses. | TE+ |

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### Elective outcomes and educational goals

**Outcome E3: Demonstrate skills required to function in an academic setting.**

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<td>E3.1</td>
<td>Understand faculty roles and responsibilities.</td>
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<td>E3.2</td>
<td>Exercise teaching skills essential to pharmacy faculty.</td>
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