



**THE UNIVERSITY OF KANSAS HEALTH SYSTEM**

**Department of Pharmacy**

**PGY2 Critical Care Supplemental Residency  
Manual 2024-2025**

## Table of Contents

<b>Residency Program</b>	
Program purpose and description	3
<b>Standard 1: Recruitment and Selection of Residents</b>	
<b>Standard 2: Program Requirements and Policies</b>	
Requirements for Successful Completion of Residency	4
Paid Time Off (PTO)	5
Procedure for requests	6
Holiday PTO	6
Special Events and Exceptions	6
<b>Standard 3: Structure, Design, and Conduct of the Residency Program</b>	
Learning Experiences	7
Practice Based Learning and Improvement	7
Required Learning Experiences	9
Elective Learning Experiences	9
Pharmacy Practice (Staffing)	10
Overview	10
Weekend Crew Assignment	10
Evening Staffing	10
Compensation Days	11
Code Blue Coverage	11
Scheduling Policy for Pharmacists	11
Supplemental Pay	12
Residency Benefits	12
On-Call	13
Project Day Expectations	13
Meetings	13
Presentations	14
Projects	16
Travel and Professional Society Involvement	17
Plan For Development	18
Customized Residency Plan	19
Resident Baseline Assessment	19
Evaluation Methods	20
Exit Survey	21
Resident Documents	21
<b>Miscellaneous</b>	22
Education Opportunities	22
Co-precepting of students	22
Teaching Certificate	22

**Purpose:** The University of Kansas Health System (TUKHS) PGY2 critical care pharmacy residency program builds on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in critical care medicine. The TUKHS PGY2 critical care pharmacy residency program provides residents with opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete the TUKHS PGY2 critical care pharmacy residency program are prepared for advanced patient care, academic, or other specialized positions, along with board certification.

**Program Description:** TUKHS PGY2 critical care pharmacy residency prepares its graduates to assume positions in critical care as clinical pharmacists. Graduates will be prepared to sit for the Board of Certification exam in critical care pharmacy. TUKHS is a university teaching hospital providing the unique capability to engage our residents in direct patient care activities, research, administration-leadership and project management, and teaching skills. The resident(s) will help carry out the missions of TUKHS which are to deliver world-class patient care to the people we serve and ensure the excellence of future patient care through exceptional learning, teaching, and research.

### **Standard 1: Requirement and Selection of Resident(s)**

Please refer to main TUKHS PGY1 & PGY2 Programs Residency Manual **Standard 2: Program Requirements and Policies**

Information regarding ASHP Accreditation standards 2.1 (term of resident appointment), 2.2 (time allowed away from program), 2.3 (ASHP duty hour requirements), 2.4 (Requirements for licensure), 2.5 (Requirements for successful completion of the program), 2.6 (Residency remediation/disciplinary policies), 2.7 (PGY1 program completion verification process), 2.8 (Program applicants residency information requirements) is available in TUKHS PGY1 & PGY2 Programs Residency Manual.

In addition to the information contained within the TUKHS PGY1&PGY2 Programs Residency manual, additional PGY2 critical care residency program information and specific requirements and policies are outlined below.

## **Requirements for Successful Completion of Residency Program (ASHP Accreditation Standard 2.5)**

The critical care resident must complete the below requirements in addition to what is outlined in the TUKHS PGY1 & PGY2 Programs Residency Manual. Residents with incomplete requirements will not receive a certification of completion.

- 1) Resident(s) MUST be licensed as a pharmacist in the state of Kansas
- 2) Resident(s) must obtain at least 80% of objectives rated as Achieved for Residency (ACHR). All objectives must be rated as Satisfactory Progress or higher by the end of the residency year.
- 3) Resident(s) shall successfully complete one longitudinal research project. (R2.2.1-6). Successful completion will be indicated by:
  - a. A final evaluation by the research project advisor
  - b. A written manuscript that meets guidelines for submission to a journal, as instructed by the Program Director
  - c. A cover memo on the manuscript with project advisor's signature indicating approval of the project
  - d. A manuscript plus memo submitted to the Program Director by the established deadline
- 4) In case of extenuating circumstances, see TUKHS PGY1 & PGY2 Programs Residency Manual for Leaves of Absence and Bereavement leave
- 5) Resident(s) must participate in a Medication Safety Event review and reporting (R2.1.3)
- 6) The resident must complete the following presentations (R4.1 and R 4.2):
  - a. Health System Critical Care grand rounds
  - b. Infectious Disease journal club
  - c. KU School of Pharmacy lecture
  - d. KCHP or equivalent professional conference presentation
- 7) The resident must complete the following projects in addition to their longitudinal research project.
  - a. Prepare or review a drug class review, monograph, treatment guideline or protocol related to the care of critically ill patients (R2.1.1)
  - b. Participate in a medication use evaluation related to critically ill patients (R.2.1.2)
  - c. Complete one administrative project deemed satisfactory by their preceptor
- 8) Provide direct patient care or demonstrate competency through didactic learning of minimally the disease states and conditions of critically ill patients as outlined in

## the Appendix of the Required Competency Areas, Goals, and Objectives for Postgraduate Year Two Critical Care Pharmacy Residencies

### **Paid Time Off (PTO)**

Residents accrue PTO in accordance with TUKHS policy 303: Paid Time Off. Examples of PTO use include, but are not limited to personal illness, family illness, and vacation. Requests for PTO must be approved by the RPD in conjunction with learning experience preceptors. Please note that PTO requests may not be granted based upon staffing needs of the department. The resident must submit a PTO request to the RPD a minimum of 5 days in advance of desired PTO start date unless otherwise discussed. It is advised that the resident not make flight arrangements until final approval for PTO is received. No time off requests will be accepted to cover the assigned weekend crew's holiday block schedule. Residents needing PTO use beyond what is accrued (e.g. extended personal or family medical needs) will be handled on a case-by-case basis between the resident and RPD.

When a resident is ill and unable to report to work, the resident must notify the learning experience preceptor and the RPD at least 1 hour prior to the start of the experience via email.

If a resident is ill and unable to work a staffing shift, the resident must notify the administrator on-call no earlier than 06:00 so that coverage may be arranged. For shifts that begin before 07:00, call 60-90 minutes before the beginning of your shift. Residents that are scheduled for second shift are required to call the Administrator-On-Call no later than 12:30 to indicate that they will not be in for their scheduled shift so that coverage may be arranged. Residents that are scheduled for third shift are required to call the Administrator-On-Call no later than 16:00 (approximately 4 hours prior to the collective beginning of all MN shifts) to indicate that they will not be in for their scheduled shift so that coverage may be arranged. Call-ins that do not follow this procedure are subject to corrective action and can be treated as a no-call no-show, accruing attendance points accordingly.

PTO is not used to attend residency required events. However, if a resident attends such an event for a duration longer than required by the residency program, PTO must be used and approved in advance. Each resident may be allowed up to two meeting days (non-PTO) for traveling to and from meeting location (details of which may be arrived at by mutual agreement with RPD).

### **Procedure for requests:**

**Email preceptor for learning experience and request approval for PTO** (residents may only miss 2 working days of a learning experience. If the resident will miss > 2 working days, the resident's comp day will be forfeited and replaced with PTO)

**Email RPD, RPC, and Pharmacist Scheduler once preceptor approval and request leadership approval**

- For example, "Requesting PTO on 4/23 and 4/24, approved by Randy McMillan, Cardiology Preceptor"
- Residents are responsible for coverage for residency required events and/or staffing trades if applicable during desired PTO dates

**Send a PTO calendar reminder to the following people: RPD, RPC and preceptor.**

**Holiday PTO**

Residents will be eligible to take PTO in the month of December during the two weeks prior to the Christmas holiday. Similar to the pharmacist staff, PTO will not be granted to residents during the staffing component of their assigned weekend crew surrounding Christmas and New Year's.

**Special Events and Exceptions**

Residents are required to notify the Pharmacist Scheduler of special dates including: ASHP Midyear, MSHP/KCHP (when applicable) and SCCM along with other departmental function dates as soon as those dates are made available. Other departmental functions may include: ENLS training, residency banquet, ASHP survey functions, and resident-related functions.

The resident is responsible for ensuring an appropriate trade is made to cover the assigned weekend and communicated to the Pharmacist Scheduler.

## **Standard 3: Structure, Design, and Conduct of the Residency Program**

### **Learning Experiences**

#### **Practice – Based Learning and Improvement**

Residents must demonstrate the ability to investigate and evaluate medication therapies as it relates to patient care. Residents are expected to develop skills and habits to be able to meet the following goals:

- Identify strengths, deficiencies, and limits in one's knowledge and expertise
- Set learning and improvement goals
- Identify and perform appropriate learning activities
- Systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvements
- Incorporate formative evaluation feedback into daily practice
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems and medication management needs
- Use information technology to optimize learning
- Participate in the education of patients, families, students, residents, and other healthcare professionals
- Communicate effectively with physicians, other health professionals, and patients
- Act in a consultant role to other members of the health care team

Organized learning experiences provide the structure for resident training in specialized areas of pharmacy practice. The resident is expected to consider the goals and objectives for each learning experience as a foundation for their experience.

Residents are expected to perform independently and demonstrate proficiency in their learning experiences. The residency preceptor provides guidance and assistance to the resident and ensures that the goals set forth by the resident and the program goals are met. The preceptor also provides the resident with frequent evaluation of their progress, including a written evaluation at the conclusion of the learning experience.

Frequent, clear communication is the key to a successful resident-preceptor relationship. In order to maximize the learning experience, the resident is expected to, in a timely manner, personally inform the preceptor of all absences, schedule conflicts, or concerns that might arise during the month. The resident and preceptor will work together to manage any such conflicts. Residents are also required to prepare for topic discussions, read materials in a timely fashion, and perform all other tasks as assigned by the preceptor.

Competency-based goals and objectives must be reviewed by the resident at the start of each learning experience. These goals and objectives may be found in PharmAcademic and on each learning experience's Learning Description. One week prior to the start of each learning experience, the resident will contact the preceptor

(identified by the person staffing the team on the schedule on the first day of the learning experience) to arrange for a pre-rotation meeting. At this pre-rotation meeting, the resident will provide the preceptor with the following:

1. Schedule or list of meetings and other commitments the resident has for the month that will require time away from the rotation
2. Rotation specific goals (3-5)

Additional issues that may be discussed at this meeting include but are not limited to: starting time each day, rotation expectations, specific goals the preceptor has for the resident to accomplish, readings to be done prior to the learning experience, end of learning experience evaluation, and preceptor expectations of the resident as well as resident expectations of the preceptor.

Example goals:

1. Identify effective methods for evaluating quality improvement opportunities
2. Learn the tools and resources needed to improve quality
3. Help facilitate a project which improves the quality-of-care patients receive related to VTE prevention



### Required Learning Experiences (Standard 3.1.a)

Residents are required to complete a 4-6 week learning experience in each of the following listed below and will be scheduled to practice independently for 1-2 weeks at the end of the certain learning experiences.

The goal of the learning experience is to:

- Broaden clinical knowledge in chosen area
- Develop rapport with multi-disciplinary staff
- Develop time management
- Display competency in independent practice
- Broaden teaching and precepting skills

Required Learning Experiences*	Number of weeks
Orientation	2-4 weeks
Medical Intensive Care Unit	6 weeks
Surgical/Trauma/Burn Intensive Care Unit	6 weeks
Neurology Intensive Care Unit	6 weeks
Emergency Department	6 weeks
Cardiology and Cardiothoracic Intensive Care Units	5 weeks
Infectious Diseases	5 weeks
Bone Marrow Transplant	4 weeks
Quality Outcomes and Administration	4 weeks
Longitudinal Staffing	52 weeks
Longitudinal Research	52 weeks
Longitudinal Code Blue	52 weeks
Longitudinal Education and Presentation	52 weeks
Longitudinal Leadership	52 weeks
Advanced Independent Practice	8 weeks total
* Required learning experiences are subject to change depending on the resident's prior PGY1 learning experiences, knowledge and abilities. Please see customized residency plan section for additional information	

In addition to the required learning experiences, residents will have the opportunity to complete one 4 week elective learning experience.

Elective Learning Experience Opportunities^	
Neonatal Intensive Care Unit	4 weeks
Solid Organ Transplant	
Acute Leukemia, Hematology, Oncology	
Poison Control/Toxicology	
Pediatric Intensive Care Unit	
Advanced Medical Intensive Care Unit	
Advanced Cardiac Intensive Care	
^Others available by request pending preceptor availability	

## Pharmacy Practice (Staffing)

### Overview

Consistent with the ASHP residency standards, each resident will complete a pharmacy practice component of the residency program. Although often referred to as “staffing” this practice component represents another learning opportunity within the framework of the residency program. Residency training makes the most of experiential opportunities to practically apply knowledge gained in the classroom and clerkships to practice in the service of patients.

This experience is crucial to the development of practice skills. The resident will gain proficiency, confidence and understanding of procedures in the following areas:

- Distribution and clinical skills
- Personnel management and leadership skills
- Insight into process improvement opportunities

### General

1. Please refer to the “Licensure” section in the TUKHS PGY1 &PGY2 Programs Residency Manual for further guidance
2. Each resident will receive a monthly staffing evaluation during their 1-on-1 with Residency Leadership. Feedback will be solicited from their corresponding clinical team.

### Weekend Crew Assignments

The PGY2 Critical Care resident will be assigned to one of the pharmacist crews which includes weekends and that crew’s assigned holidays.

**After the training period, once residents are assigned to a weekend crew, they are responsible for working their assigned weekends without exception.** No requests for time off will be granted for assigned weekends. Weekend shifts can be traded with other critical care pharmacists to accommodate needs for time off on weekends.

### Evening Staffing

Critical Care PGY2 Residents will be required to staff one 8-hour evening shift every two weeks. This shift date will be based on the needs of the department pharmacist schedule and residents are responsible for scheduled shifts – no exceptions. Residents are allowed to trade evening shifts with another critical care pharmacist. Independent evening staffing will begin after evening staffing training if Residency Leadership, as well as the clinical pharmacists and clinical coordinator/manager for the team, deem the resident ready to independently staff. There will not be an evening staffing shift scheduled during the resident’s advanced independent practice (AIP) times.

## Compensation Days (comp days)

### Learning Experience Compensation Day Schedule

Residents will have one comp day available per learning experience (for a total of 9) that can be used at the discretion of the resident.

### Expectations for Comp Days

- The resident must be off site (not on campus)
- The resident's comp day per learning experience must be used within the time frame of the learning experience or will be lost.
  - Comp days may not be used during a mandatory resident event or result in >2 days off from the learning experience
  - Once approved by preceptor – the resident will send out a calendar appointment to the RPD, RPC, Learning Experience Preceptor, Pharmacist Scheduler, RLC, PGY1 and PGY2 Residents (ex: Jane Doe – Comp Day (no PTO))
- The resident may pick up extra shifts on their comp day as approved by Residency Leadership. Approved hours must maintain compliance with the [Pharmacy Specific Duty Hours Requirements](#) for the ASHP Accreditation Standard for Pharmacy Residencies.

### Code Blue Coverage

The resident will hold a code blue pager for the duration of the residency and will be responsible for attending code blues throughout the hospital during their normal rotation and staffing hours.

### Scheduling Policy for Pharmacists

The pharmacist schedule will be prepared with focus on consistent, high-quality pharmaceutical care. Creating a schedule focused on providing consistent, high-quality patient care, as well as consideration of and flexibility for staff members requires a professional and collaborative effort by both the scheduler and the staff.

### Communication of the schedule

The temporary schedule will be released electronically (via e-mail) with a deadline on adjustments/changes. Residents are responsible for reviewing information on the schedule and communicating discrepancies to the Pharmacist Scheduler prior to the final schedule being released. The final schedule will be posted on Teams. Information regarding schedule dates is available on Teams under Pharmacist Schedules, including deadlines for PTO & schedule requests, and anticipated temporary and final schedule publish dates.

### Trading

Residents are expected to decline to participate in trades that would require working:

- A shift or area where they are not competent or are in any way uncomfortable

- More than one “double” (> 16-hour day) in one 7-day period unless approved by a RPD/RPC
- A “double” order verification shift
- More than 80 hours per week (averaged over 4 weeks)
- More than 6 days in a 7-day period (averaged over 4 weeks)

**An email to the Pharmacist Scheduler must be completed in all cases and all parties involved in the trade must be included in the email.**

### **Supplemental Pay**

All residents will be eligible for supplemental shift pay at the pharmacist rate

Supplemental Pay will be granted in 4- or 8- hour increments in the following circumstances:

- a. Called in to staff while on call
- b. Volunteering for open or “missing shifts” in the final schedule
- c. Other circumstances will be evaluated as necessary

Supplemental Pay will not be granted for shifts in the assigned learning experience area. For example, if you are on a learning experience in which your preceptor calls in sick and you cover the shift for the day, you will not receive supplemental pay. If you are pulled from the learning experience to staff an area in which you are not on as a learning experience, you will be compensated.

### **Residency Benefits**

The resident is a full-time salaried employee of The University of Kansas Health System and as such is eligible for full benefits under the compensation and benefit plan of the organization. As a salaried employee, the resident will not be compensated as an “hourly employee” but will be paid a residency stipend. The resident should expect to work more than 40 hours per week and should demonstrate a commitment to work an undefined number of hours to meet learning experience requirements or pharmaceutical care responsibilities.

- Stipend Salary
  - The resident is paid every two weeks in keeping with institutional policy and checks or direct-deposit slips mailed directly to the resident.
- Vacation Days
  - All leave will be coordinated and approved by the RPD/RPC and current learning experience preceptor to ensure that program goals are met
  - Due to the short duration of the residency program and the concentrated learning process, residents are encouraged to reserve vacation days until the end of the residency year to use for interview days
  - Sick leave will be deducted from PTO (paid time off) bank. Any absences due to sickness must be reported to the RPD/RPC and current preceptor / supervisor as early as possible on **each** day of illness requiring absence.
  - If the resident is pregnant and delivers during the residency year or has a spouse who delivers during the residency year, time taken off after

delivery will have to be made up after the previously defined end date of the residency year

- Qualification for group rate health, dental, life insurance and prescription drug benefits
- Expenses paid/reimbursed for SCCM meeting and a local conference is dependent on the conference opportunities
  - Financial status of the health system will determine if financial support is available for attendance
  - Other educational meetings may be requested by the resident but must be approved by the program director and coordinator for reimbursement and clinical evaluation

### **On-Call Responsibilities**

The PGY-2 Critical Care resident will not be scheduled on a prespecified on-call schedule. They may however be called upon as last resort to help provide emergency coverage in the event that normal coverage procedures fail. These staffing responsibilities may be required on occasion during learning experiences.

Residents will be compensated for any shifts that are asked to staff outside of the residency staffing requirements (see Supplemental Pay section above).

Residents called in to staff during mandatory time free of duty will receive a comp day to be scheduled by Residency Leadership and the Pharmacist Scheduler as needed in order to maintain compliance with ASHP Accreditation Standard for Pharmacy Residencies Pharmacy Specific Duty Hours Requirements.

### **Expectations for Project Days**

- One project day will be assigned to the resident per major presentation/project. Major presentation and projects may include:
  - ID Journal Club
  - Critical Care Grand Rounds
  - Longitudinal Project x2
- Additional project days may be assigned at the discretion of the RPD

### **Meetings**

To broaden and coordinate the residency experience, residents may be requested to attend a variety of meetings throughout the year. These may be departmental meetings, administrative staff meetings, or clinical meetings. In most cases, the preceptor will assign meeting attendance at the beginning of the month. In other cases, the resident will be requested to attend a specific meeting by another preceptor in order to broaden the resident's educational experience or assist with the development of a project. It is the residents' responsibility to communicate meeting attendance to the appropriate individuals.

In addition to meetings assigned by preceptors, the critical care resident is expected to attend the following meetings: ICU/ED team meeting, leadership journal clubs, critical care grand rounds, antimicrobial stewardship subcommittee, opioid stewardship subcommittee (active member/meeting minutes), sepsis (ad hoc), critical care committee (ad hoc) and P&T (ad hoc). The critical care resident may attend SCCM and a local conference dependent on the financial status of the health system. Midyear attendance is up to the discretion of the resident with approval from the RPD. The resident may attend various ad hoc meetings outside TUKHS assigned by the RPD such as GKC Research Day, ASHP Visiting Leader program, and KC-PGY2 networking events.

### **Inpatient Huddle**

Inpatient or Team based huddles are held virtually. The purpose of these huddles is to inform the pharmacy staff of developments occurring within the hospital and department. Residents are highly encouraged to call into the ICU/ED team huddles regardless if on an ICU/ED specific rotation or not.

### **Mandatory Resident One on One**

'One on One' meeting sessions are a time in which the resident will meet with the RPD and RPC in a specific area and discuss pertinent topics that have taken place in the resident's experience. This is a time in which teaching, counseling, guidance, and feedback will be given to the resident. This will occur on a monthly basis.

Topics may include:

- Rotation progress
- Preceptor feedback
- Residency project progress
- Resident career interests
- Conference travel
- Program updates

### **Required Resident Presentations**

The following presentations are mandatory:

- **ICU/ED Team Journal Review**
  - Expected dates: Sept, Dec, March (SCCM report out), May
  - The resident is required to conduct four 45-minute journal reviews throughout the year. Journals will be selected independently by the resident or in conjunction with their learning experience preceptor or RPD/RPC.
  - Includes an Infectious Disease journal club (during ID learning experience) and Kansas City PGY2 collaboration journal club
    - ID journal club: CME presentation to the infectious disease providers and fellows, infectious disease pharmacists and students.
    - PGY2 collab journal club: Topic to be determined by collaboration organizers, usually burn. Presented to PGY2 critical care residents and preceptors in the greater KC area

- **SCCM abstract/presentation, if accepted**
  - Expected date: August and late winter/Spring of academic year
  - The resident is required to submit for SCCM abstract acceptance in August to be presented at the conference meeting of the following year. General abstract information may be found on the SCCM website: <https://www.sccm.org/Annual-Congress>
  - Once the abstract is selected, presentation guidelines are sent to the presenter to be reviewed.
- **Pharmacy Student Lecture series**
  - Expected date: March
  - The resident is required to conduct one 2-hour presentation during the year as part the University of Kansas School of Pharmacy Pharmacotherapy course. The presentation will take place in the Spring in Lawrence, Kansas. The resident will present a topic pre-determined based on the needs of the Pharmacotherapy course.
- **Health-System Critical Care Grand Rounds**
  - Expected date: April/May
  - The resident is required to conduct one 60-minute presentation during the residency year. The presentation typically takes place in April/May. The resident will present a topic determined by the RPD and Physician Critical Care Practice Council.
- **Local/regional pharmacy conference**
  - Expected date: May
  - Example: Kansas Council of Health-System Pharmacy (KCHP) Residency Conference
    - The resident is required to conduct one 15-minute presentation at the KCHP Residency Conference that reflects the longitudinal research completed by the resident that year.
    - The resident will also complete two practice sessions for their KCHP Residency Conference oral presentation.

It is under the discretion of the RPD to determine other formal presentations throughout the year that the resident will participate in beyond the mandatory ones listed above. Presentation dates may change as needed.

PGY1 grand rounds and residency leadership journal club attendance is required.

**Presentation Objective Considerations:**

1. Demonstrate a thorough knowledge for topic presented
2. Compose, present and communicate information that is brief, well structured, and error free
3. Analyze patient cases for pertinent pathophysiologic processes, pharmacotherapy, and drug related problems
4. Interpret drug response and evaluate risk/benefit in patient cases
5. Identify controversial issues involved in patient cases and develop a therapeutic plan

## 6. Apply critical literature evaluation skills to medical literature

### **PGY2 Critical Care Pharmacy Residency Research Project**

#### **Project Overview**

Each resident is required to complete one project directed at enhancing personal and professional growth while benefiting the pharmacy department through innovative changes in pharmacy practice. These projects may be in the form of original research, development, enhancement, or evaluation of some aspect of pharmacy services. The project will be a longitudinal pharmacy practice project suitable for presentation of the results at a local/regional conference, and a final manuscript submitted prior to the end of the PGY2 year.

Residents will select their projects from a pre-approved project list (provided by the RPD/RPC). Project ideas outside of the pre-approved list must be approved by the RPD prior to project initiation. Additional co-investigators may be solicited if needed, keeping in mind the intent of the project is to develop and strengthen the resident's independent project management and investigation skills. A physician co-sponsor is recommended for projects pertaining to a specific area of medicine. Justification for any project idea may be requested by residency leadership.

All projects shall be directed toward useful outcomes and not merely be an academic exercise for the sole purpose of satisfying this requirement. The purpose of the resident project is to further develop the resident's problem-solving skills and expose the resident to research methods while addressing an issue or area in need of study, development, or evaluation.

A formal research protocol, with any required supporting documents, must be reviewed by the RPD for approval (see required format and timetable below). Other preceptors may also be asked to evaluate the protocol as a subject matter expert as well as for feasibility of completion. Prior to submission to the RPD, the resident's primary project preceptor must review and approve the protocol.

All residents, preceptors, and co-investigators are required to complete online IRB training prior to submitting a research protocol to the RPD if the project requires IRB approval. Additionally, all residents are strongly encouraged to complete online IRB training regardless of whether it is needed for their projects. The certificate of completion should be submitted with the protocol and stored in each resident's portfolio.

Each resident, in coordination with their primary project preceptor, is responsible for securing required approvals for their project. This includes, but is not limited to, Pharmacy Information Technology (IT), review by a statistician, Institutional Review Board (IRB)/Human Subjects Committee (HSC) submission and review (if applicable), Protocol Review and Monitoring Committee (PRMC) review (if applicable), or other groups as needed. Throughout the year, the primary preceptor shall ensure that the resident is



completing the research project according to the established objectives, procedures, and timeframe.

The project topic(s) should be of personal interest to the resident and of value in the provision of pharmaceutical care or to the department in provision of services. The project should be selected with the intent of submitting the written results for publication in an appropriate professional journal. To publish research results that may be applicable to institutions outside of The University of Kansas Health System, IRB/HSC approval is required. IRB/HSC approval is not required for the quality-focused project to be presented at the University Health Consortium (UHC) poster session but should be considered for the KCHP Residency Conference project.

Following completion of the research project, each resident will prepare a final manuscript. The final paper must be approved by the primary project preceptor, and **THEN** submitted to the RPD for final review. The manuscript should follow the guidelines and requirements for the submission of manuscripts established by the anticipated journal of submission, the *American Journal of Health-System Pharmacist*, or another appropriate peer reviewed journal.

A tentative projected timetable is outlined below based on project selection. Anticipated failure to meet deadlines for the interim steps should be proactively discussed with the project's primary preceptor and RPD/RPC. If the resident fails to successfully complete the residency project before the end of the 12-month residency period, a short extension may be granted by the RPD. The residency certificate will not be conferred until **ALL** requirements are successfully completed.

In addition to a longitudinal research project and manuscript the resident will complete an administrative project. The administrative project may include a medication use evaluation and/or initiative to help advance clinical pharmacy practice at TUKHS.

**(SEE SUPPLEMENTAL RESEARCH MATERIALS FOR PROJECT FORMS AND DEADLINES)**

### **Travel and Professional Society Involvement**

Residents completing the program at The University of Kansas Health System are expected to develop and maintain an involvement in professional society activities on a local, state, and national level. Involvement is critical to the development of the resident, the resident's network, and the achievement of professional and personal goals.

At a minimum:

1. Residents maintain a membership and assume an active role in the Society of Critical Care Medicine (SCCM).
2. Residents are encouraged to join other societies and practice groups that support their professional needs such as the Kansas Council of Health System Pharmacists (KCHP), American College of Clinical Pharmacy (ACCP), or American Society of Hospital Pharmacy (ASHP).

As part of the resident's professional and personal development, attendance at meetings on a national level is expected when financially possible. Each resident shall be encouraged to attend the SCCM Congress and local/regional residency conference meetings.

Funding for attendance at other major meetings is contingent upon acceptance of a presentation or other service-related activity and the financial status of the health system and pharmacy department.

Approval to attend meetings beyond those outlined for the residency program, or not directly related to the goals of the residency program, is at the discretion of the residency program director. The option exists for the resident to use PTO to attend these meetings if approved by the Director of Pharmacy. Requests for time off with pay and funding to support travel is at the discretion of the Director of Pharmacy based on the financial status of the health system. Although approval to attend the meeting may be provided, full or partial funding may not be available based on budgetary issues and the value of the meeting for the Department of Pharmacy.

### **Plan for Development**

Consistent with ASHP residency standards, each pharmacy resident completing the training program shall prepare an individual plan for development. The resident assumes primary responsibility to develop the plan and document their respective goals, interests, strengths, and planned learning experiences and activities.

The RPD/RPC will assist the resident in the decision process. Within the framework of ASHP resident standards and the administrative guidelines of the program, the resident is encouraged to assume ownership of his/her training experience.

In order to prepare a plan, the resident should address the following topics, preferably in a narrative form.

1. State your professional and personal goals, both short term (5 years) and long term (10 years). The focus should be on professional goals, with a brief summary of personal goals. Personal goals may be written on a basis of importance to you, but may include the following areas: family, religion, financial, free time, health, or exercise.
2. Describe your current practice interests.
3. Identify your strengths – clinical and personal.
4. List areas of improvement during the residency year.
5. Include a current copy of your curriculum vitae.

The plan for development will be uploaded into PharmAcademic and will serve as the foundation for the resident's customized residency plan.

## **Customized Residency Plan**

Consistent with ASHP residency standards, the RPD will develop a customized residency plan (CRP) for each resident. The customized residency plan considers each resident's entering knowledge, skills, attitudes, abilities, and interests and will serve as the resident's roadmap to successfully accomplishing customized goals. Residents' strengths and weaknesses will be accounted for by incorporating specific learning activities to facilitate development. The customized plan will account for each resident's specific interests while not interfering with the achievement of the program's educational goals and objectives.

The RPD/RPC will meet during orientation training with each resident to individually review the initial customized plan. The plan is meant to be a fluid document that is shaped by the resident's learning experiences throughout the year. It will be reviewed and updated at least quarterly by the RPD/RPC and resident, including a final review at the completion of the residency year.

## **Resident Baseline Assessment**

### **Purpose**

A resident baseline assessment process is utilized to provide a subjective and objective evaluation of the baseline clinical skills for residents. This process will help to identify areas that the resident will need to further develop or focus on throughout the year and serve as a reference for the preceptors and residency leadership to use in their evaluations. The resident may use this as an aid in the self-assessment process, and to help direct their own learning experiences.

The overall goal is to achieve consistency and proficiency in the basic skills among the residents given their various training backgrounds, to identify and provide feedback on areas for improvement, and ultimately help to build an individualized, structured residency plan.

Baseline assessment is completed through the following:

1. Customized assessment in PharmAcademic
2. Computer based and instructor lead clinical pharmacist education modules (Annual Competency)

### **Follow-Up**

The information attained through the initial assessment will continue to be assessed throughout the residency year, and the progress of the resident will be followed closely by the RPD/RPC who will act as the intermediary between residents and preceptors. Residents should expect that the areas identified as needing improvement will be re-evaluated as they progress from one learning experience to the next. Ideally, by the end of the year, the resident will gain the knowledge and experience required in order to achieve the goals of the residency.

## Evaluation Methods

The evaluation will include objective and subjective assessments of competence in patient care, pharmaceutical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice.

Program leaders will then use multiple evaluators to document progressive resident performance and provide the resident with documented semi-annual evaluation of the performance. The evaluations of the resident performance will be accessible for review by the resident, in accordance with policy.

PharmAcademic® will be used for documentation of all scheduled evaluations (per the chart below). Please see the TUKHS PGY1 & PGY2 Programs Residency Manual for evaluation definitions. For all evaluations completed in PharmAcademic®, the resident and the preceptor will independently complete the assigned evaluation and save as draft. The resident and the preceptor will then compare and discuss the evaluations. This discussion will provide feedback both on performance of the activities and the accuracy of the resident's self-assessment skills. Evaluations will be signed in PharmAcademic® following the discussion within 7 days of the conclusion of the learning experience.

<b>What type of evaluation</b>	<b>Who</b>	<b>When</b>
Weekly informal feedback sessions	Preceptor	End of each week
Summative	Preceptor	End of learning experience
Summative self-evaluation	Resident	End of learning experience
Preceptor evaluation	Resident	End of learning experience
Learning experience evaluation	Resident	End of learning experience

Summative evaluations: This evaluation summarizes the resident's performance throughout the learning experience. Specific comments should be included to provide the resident with information they can use to improve their performance in subsequent learning experiences.

### **To be evaluated appropriately, the resident must:**

- Meet with the learning experience preceptor prior to the start of each new learning experience, to review and customize the learning experience's goals and objectives.
- Meet with the preceptor on a regularly scheduled basis (weekly), as determined by the preceptor and resident.
- Modify the rotation or its' goals and objectives as necessary
- Complete the resident self-assessment and rotation/preceptor evaluations in PharmAcademic® in a timely manner following completion of the learning experience.

## **Systems-Based Practice**

Residents must demonstrate an awareness of and responsiveness to the larger context of the department and organization, as well as the ability to call effectively on other resources in the system to provide optimal pharmaceutical care.

### **Residents are expected to:**

- Identify areas of improvement and communicate these to appropriate individuals after learning experiences and/or staffing shifts, for example through daily ICU/ED huddle
- Participate in identifying system errors, implementing potential system solutions, and submitting reports in Safety Intelligence
- Work effectively in various health care delivery settings and systems relevant to their clinical specialty
- Coordinate pharmaceutical care within the health care system
- Incorporate considerations of cost awareness and risk-benefit analysis in patient- and/or population-based care as appropriate
- Advocate for quality patient care and optimal patient outcomes
- Work in multidisciplinary teams to enhance patient safety

## **Exit Survey**

Prior to the completion of the residency program, the residents will have the opportunity to express thoughts on ways of improving the program. This exit survey typically occurs in June and is used to improve the program as recommended by the residents.

## **Resident Documents**

Residents are expected to save all residency related documents in appropriate locations on the Pharmacy Share Drive, Teams, and PharmAcademic. Documents include but are not limited to resident self- assessments, development plans, projects related documents, learning experience materials, abstracts, etc. The share drive should be updated periodically, and residents are expected to save all materials prior to completing the program.

## **Miscellaneous**

### **Education Opportunities**

The establishment of a teaching requirement is an effort to ensure that the resident develops competency in teaching and training health care professionals and students. The establishment of a teaching requirement also has applicability to ASHP outcomes, goals, and objectives for pharmacy practice training. The ideal situation is for every resident to have a significant amount of experience in all areas of education, while at the same time accomplishing this with a minimal amount of time away from rotational activities.

### **Co- precepting of students**

The structure of this educational requirement will be largely left up to the preceptor of the resident and student(s). To achieve this goal, it is desired that the resident would be

comfortable in leading a discussion an hour in length with a student, under the preceptor's oversight, at least two times in a rotation month. The resident would be expected to take a larger leadership role in precepting students, as outlined in the rotation syllabi. Also, a resident may assist the student on rounds, following up with patients, drug information questions, or other daily activities of a rotation month. It is desired that the resident would participate in this when well into the residency year or is in an area in which the resident is more comfortable.

### **Teaching Certificate Program**

The teaching certificate program is provided by The University of Kansas School of Pharmacy. Participation in the teaching certificate program is not a mandatory residency experience. The program has a limited number of spots each year. The privilege of participation in the program is based on the prospective participant's application and feedback from the RPD. An email will be sent in July or August for participation as well as explaining the schedule and requirements.