THE UNIVERSITY OF KANSAS HEALTH SYSTEM
Department of Pharmacy

PGY2 Medication-Use Safety & Policy Supplemental Residency Manual

2024-2025

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Contents

I. Residency Program Purpose Statement

PGY2 residency programs build upon Doctor of Pharmacy (PharmD) education and PGY1 pharmacy residency training to develop pharmacist practitioners with knowledge, skills, and abilities as defined in the educational competency areas, goals, and objectives for advanced practice areas. Residents who successfully complete PGY2 residency programs are prepared for advanced patient care or other specialized positions, and board certification in the advanced practice area, if available.

II. Residency Program Description & Structure

The PGY2 Medication-Use Safety and Policy (MUSP) Pharmacy Residency is based upon American Society of Health-System Pharmacists (ASHP) standards for specialized pharmacy residencies and the *Required Competency Areas, Goals, and Objectives for Postgraduate Year Two (PGY2) Medication-Use Safety and Policy Pharmacy Residency.* The specific program for each resident varies based upon the resident's goals, interests, and previous experience.

The PGY2 MUSP Pharmacy Residency at The University of Kansas Health System (TUKHS) is designed to transition PGY1 residency graduates from generalist practice to a specialized role as an organizational leader in the practices of medication safety, medication-use policies/processes, and formulary management. This will be achieved through the development of expertise in the analysis and application of medication-related information, clinical problem solving, professional communication, time management, leadership, and project management skills. The resident will play an integral role in ensuring the appropriate, safe and cost-effective use of medications for TUKHS patients.

This is a twelve-month program which consists of longitudinal learning experiences in Practice Management & Precepting and Research & Publication, and concentrated learning experiences in Medication Safety, Advanced Medication Safety, Formulary Management, Advanced Formulary Management, Automation & Technology, and Quality Improvement. The resident will have two elective rotations, with options including Pharmacy Supply Chain, Regulatory & Compliance, Cancer Care Medication Safety, Pharmacy IT, Academia, and Pharmacy Operations. For residents not completing a PGY1 Pharmacy Practice Residency at TUKHS, an orientation to TUKHS and Department of Pharmacy Services will be required.

Pharmacists with expertise in the learning experience area of practice will serve as primary preceptor for the learning experience and pharmacists from related practice areas (i.e., informatics, operations and supply chain) will provide additional expertise. The resident will work closely with physicians, nurses and other specialties as a part of interdisciplinary teams. Preceptors provide guidance and are available to the resident as a resource throughout the learning experience. The resident is expected to perform independently and demonstrate proficiency in practice. Upon successful completion of the program, trainees are awarded a residency certificate.

The resident will develop a mastery of knowledge in searching, retrieving, analyzing, synthesizing, and disseminating biomedical literature. They will assert their ability to access, interpret and apply literature to decision making about policy development for the use of

medications, and the development of medication-use processes that reflect those policies. Graduates possess the advanced communication and facilitation skills to inform the organization's policy-making bodies, influence their decision making, and participate in the management of the decision-making process. The resident will also develop and refine skills needed to serve as medication safety leader within a growing organization, including event review and investigation, promoting the use of strong interventions to prevent event recurrence, and fostering a culture of safety.

During the program, the resident must complete a self-directed research project to demonstrate proficiency in clinical research. The scope, magnitude and type of project may vary according to individual interests and must be completed in a manner suitable for presentation. A final written manuscript suitable for publication is required to complete the requirements of the residency program.

The education component of the program enables the resident to develop teaching and training skills to meet the education needs of both health care professionals and health care professionals in training. A least one formal presentation will be required. During the second half of the year, the resident will serve as a mentor for PGY1 residents and/or APPE students on a Medication Safety and/or Formulary Management rotation.

The ultimate goal of the program is to develop pharmacists who are competent and effective practitioners and prepared to take on a variety of roles including medication-use and policy specialists, medication safety specialists, drug information specialists, formulary managers and/or to share skills with others by serving as a faculty member.

III.   Residency Program Competencies

Residents will develop skills to be competent in the following areas:

1. Assessing Safe and Effective Medication-Use Systems and Policies
2. Medication-Use Data Collection and Analysis
3. Designing Safe and Effective Medication-Use Systems /Policies
4. Drug Shortages and Supply Interruptions
5. Medication-Use Technology
6. Medication-Use Research
7. Leadership and Management
8. Teaching, Education, and Dissemination of Knowledge

Within each competency area residents will be taught and evaluated on specific goals and objectives, as defined by ASHP.

IV.   Outcomes

Residents will be expected to:

- Develop a mastery of knowledge and critical literature evaluation skills to achieve expert level competency in the analysis and application of medication-related information.

- Contribute to the effective management of the organization's formulary, and medication-use policies and processes.

- Contribute to the development of safe medication practices across the healthcare enterprise.

- Exercise administrative, leadership and practice management skills.

- Conduct medication-use related projects.

- Demonstrate excellence in the provision of education, training, and evidence-based information for health care professionals and health care professionals in training.

- Contribute to the management of the organization's budget.

V.   Requirements for Successful Completion of Residency

Residents must complete all program specific requirements listed below in addition to general residency requirements as outlined in the residency manual to graduate from the MUSP program:

1) Successful completion of orientation competencies and training checklists.

2) Successful completion of all required learning experiences as outlined in Learning Experiences/Schedule section below.

3) At least 80% of objectives must be rated as Achieved for Residency (ACHR).   All objectives must be rated as Satisfactory Progress or higher by the end of residency year.

4) The following objectives must be marked as Achieved for Residency (ACHR) for the resident to successfully complete the program:

R1.1.1	R1.1.2	R1.1.3	R2.4.1	R2.4.2	R3.2.1	R3.2.2
R3.2.3	R3.2.4	R3.3.1	R6.1.4	R7.1.1	R7.1.3	R7.2.1
R7.2.4	R8.1.1	R8.2.1	R8.2.7			

5) Successful completion of projects or assignments below, including but not limited to:
   a. Proactive risk assessment (FMEA, ISMP gap analysis, etc)
   b. Subcommittee or taskforce agenda(s) prepared by resident
   c. Subcommittee or taskforce minutes(s) prepared by resident
   d. Written summary of literature evaluation prepared by resident
   e. Policy or Procedure developed or revised by resident
   f. MUE with Executive Summary
   g. Completed PDSA or Learner Storyboard (aka PDCA) for a project
   h. Quarterly ADR Summary Report prepared by resident

6) Successful completion of the following presentations:
   a. One 60-minute CE presentation
   b. One 45-minute presentation (Teaching &Precepting rotation)
   c. Poster presentation of research or MUE

      d. At least 3 book club presentations
      e. Presentation of project at designated conference (MPRC, KCHP Residency Conference, or equivalent)
      f. Presentation of Agenda item at P&T Committee or Subcommittee meeting

7) Successful completion of research project as indicated by:
      a. Final review and approval by the research project advisor
      b. A written manuscript that meets guidelines for submission to an appropriate journal and is approved by the RPD

8) Successfully complete the IHI Open School Basic Certificate in Quality and Safety.

9) Successfully complete the ASHP Medication Safety Certificate Program.

10) All required documents loaded in PharmAcademic™.

11) Completion of exit survey with suggestions for program improvement.

VI.   Residency Advisory Committee

The MUSP Residency Advisory Committee (RAC) governs the PGY2 MUSP program. The committee is comprised of primary preceptors from required learning experiences and is chaired by the PGY2 MUSP RPD. The MUSP RAC meets routinely to review and discuss the progress of the resident and adjust the resident's development plan with mentoring and guidance provided to the resident as appropriate. At the end of each residency year, the MUSP RAC will discuss areas of strength and opportunities for improvement to the program as well as implementation strategies as part of ongoing quality improvement to the residency.

VII.   Learning Experiences / Schedule

Organized learning experiences provide the structure of 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.

Required learning experiences are outlined in the table below. Elective experiences will be mutually agreed upon by the resident and RPD based on the resident's interest and schedule.

Required Learning experiences	Duration
Orientation	4 – 6 weeks
Formulary Management	4 weeks
Medication Safety	4 weeks
Elective 1	4 weeks
Automation & Technology	4 weeks
Research & Publication	Longitudinal/ 4 weeks focused
Advanced Medication Safety	7 weeks
Advanced Formulary Management	6 weeks
Quality Improvement	6 weeks
Elective 2	4-6 weeks

Practice Management & Precepting	Longitudinal/ 3 weeks focused

Elective Rotation options include:
- Pharmacy Supply Chain
- Regulatory & Compliance
- Cancer Care Medication Safety
- Pharmacy IT
- Academia
- Pharmacy Operations.

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, at a minimum, a written evaluation at approximately the midpoint of the rotation and at the end of learning experience for longitudinal learning experiences and at end of learning experience for learning experiences less than 12 weeks duration.

It is also important that the RPD and preceptors are provided feedback on their roles as mentors to the resident and regarding the quality of the learning experience. Therefore, the resident will complete preceptor evaluations and learning experience evaluations on or before the midpoint and at the end of each longitudinal learning experience.

Frequent, clear communication is the key to a successful resident/preceptor relationship. 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. It is at the discretion of the preceptor to allow 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.

At the beginning of the learning experience, the resident and preceptor will meet to discuss the resident's goals for the learning experience, learning experience description, schedule, learning experience expectations, specific goals the preceptor has for the resident to accomplish, readings and topic discussions, scheduling of learning experience evaluations as well as general preceptor expectations of the resident and resident expectations of the preceptor.

VIII. Meetings

The resident will be required to attend a variety of meetings throughout the year. Meeting attendance will be assigned by the preceptor at the beginning of the learning experience; however, additional meetings may be scheduled on an ongoing basis and all meetings are subject to cancellation or rescheduling. It is the resident's responsibility to communicate meeting attendance and conflicts to the appropriate individuals. Required meetings may include:

- <u>P&T Leadership</u>; Meet with P&T/pharmacy leadership to discuss pending agenda items and set monthly agenda. May include meeting with requestors of agenda items that require additional information/discussion.

- <u>Pharmacy & Therapeutics (P&T) Committee</u>

- <u>Enterprise Medication Safety Subcommittee</u>

- <u>Antimicrobial Stewardship Subcommittee</u>

- <u>Heme/Onc/BMT Subcommittee</u>

- <u>Opioid Stewardship Subcommittee</u>

- <u>Perioperative Medication Safety Subcommittee</u>

- <u>Cancer Care Medication Safety Subcommittee</u>

- <u>Patient Safety Program Committee</u>: Chaired by Dr Williamson and Liz Carlton (VPs-Patient Quality and Safety), comprised of both physician and hospital reps from across the enterprise.

- <u>Pharmacist Staff Meeting</u>; Inform pharmacy staff of developments occurring within the hospital and department.

- <u>Pharmacy Leadership Collaborative</u>; Enterprise pharmacy leadership meeting.

- <u>Resident Meetings</u>; Cover various topics related to research, conference travel, and department updates.

The resident will meet approximately once weekly with the RPD to discuss resident progress regarding learning experience activities, workload, and scheduling. Other guests may be invited based on the subject of the meeting. The resident will meet with the RPD quarterly to review the resident's customized residency plan.

IX.   Educational Opportunities

The education component of the program enables the resident to develop teaching and precepting skills.

Pharmacy Grand Rounds Continuing Education Presentation

The PGY2 MUSP resident will present at Pharmacy Grand Rounds open to pharmacy staff and PharmD candidates. This will provide residents the opportunity to improve oral and written communication skills. The presentation should be at least 60 minutes in length and should be done in PowerPoint format.

- Topics may include case presentations, drug therapy seminars, clinical controversies, journal clubs, brown bags, etc. and should be approved by RPD/RPC.

- The resident will be required to have a practice session with the RPD/RPC and preceptor (if applicable) prior to the presentation.

- A handout with complete references must be provided for attendees.

- The resident will be evaluated by the audience followed by a formal discussion with the RPD and preceptor (if applicable).

- The resident is responsible for submitting the presentation for CE approval to the Kansas Board of Pharmacy. (Additional information is available on Sharepoint: Pharmacy → Precepting → Resident Information → CE and Grand Rounds).

- The resident is responsible for collecting the names of attendees for purposes of issuing CE certificates once approved by the Kansas Board of Pharmacy.

X.   Plan for Development / Customized Residency Plan

Consistent with ASHP residency standards, each pharmacy resident completing the training program shall have an individual customized plan for development.

The RPD assume a role to mentor the resident and assist in the decision process for the resident. Within the framework of ASHP resident standards and the administrative guidelines of the program the resident is encouraged to assume ownership of their training experience.

To assist the RPD and RPC in preparation of a development plan, the resident should complete the ASHP Entering Objective-Based Self-Evaluation and Entering Interests Form as assigned in PharmAcademic. The RPD will meet with the resident during orientation training to 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. The 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 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 will evaluate progress each quarter and meet with the resident to discuss changes, updates, etc.

XI.   Evaluation Methods

Evaluation is an integral part of the residency program. The learning goals and objectives of the various aspects of the residency are evaluated using PharmAcademic. Resident performance will be evaluated in a timely manner during each learning experience. PharmAcademic evaluations must be completed within 7 days of the assigned evaluation and at the end of the learning experience.

Resident Responsibilities
- Meet with the learning experience preceptor at the start of each new learning experience to discuss and customize the learning experience's goals and objectives.

- Review the goals and objectives assigned to the learning experience as listed in the learning experience description prior to the first day of the learning experience.

- Meet with the preceptor on a regularly scheduled basis (weekly), as determined by the preceptor and resident.

- Solicit feedback on performance on a regular basis.

- Complete the resident self-assessment and learning experience/preceptor evaluations in PharmAcademic prior to evaluation meeting with preceptor. In addition to the required preceptor and learning experience evaluations to be completed at end of learning experience, the resident will complete these evaluations at midpoint for each longitudinal learning experience.

RPD Responsibilities:
After the completion of each evaluation, the RPD will review all the required evaluations and will work with the MUSP RAC to address areas in need of improvement and other comments by developing a plan of action, if needed.

XII. Pharmacy Practice (Staffing)

The resident will be assigned to a weekend/holiday crew and usually staff one major holiday, one minor holiday and approximately every fourth weekend as part of the Practice Management and Precepting Longitudinal rotation.
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The specific staffing area(s) will be determined based upon interest and previous experience of the resident as well as staffing needs of the TUKHS Department of Pharmacy Services. Building upon the skills gained during the PGY1 year, the resident will continue to gain proficiency, confidence and understanding of distribution, provision of clinical services, personnel management and leadership skills. A particular focus for the MUSP resident will be insight into medication safety, formulary management, and process improvement opportunities.

Each resident will work approximately every fourth weekend as designed by weekend schedule provided at the beginning of the residency. They will be assigned to a weekend crew that will dictate the holidays they are scheduled to work.

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.

Weekend Crew Assignments
The resident will be assigned to a weekend crew and will be provided with a schedule reflecting weekends and holidays to be worked. Dates assigned to weekend crews will be maintained so that no less than 12 months advance will be available.

After the training period, once resident is 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 residents or pharmacists trained in the same work area to accommodate needs for time off on weekends.

Communication of the Schedule

The temporary schedule will be released electronically (via e-mail) with a deadline for adjustments/changes. The resident is 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 Sharepoint.

Trading
The resident may trade shifts in order to have time off, or at the request of another resident or pharmacist. The resident is 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. 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.

The resident must comply with Pharmacy Specific Duty Hours Requirements for the ASHP Accreditation Standard for Pharmacy Residencies Requirements to ensure that residents are not compromising patient safety or minimizing the learning experience by working extended periods of time. Refer to the Department of Pharmacy PGY1 & PGY2 Programs Residency Manual for details regarding duty hours and moonlighting.

XIII.   Paid Time Off (PTO) and Comp Days

Paid Time Off (PTO)
Refer to the Department of Pharmacy PGY1 & PGY2 Programs Residency Manual for details regarding attendance, PTO, Family Medical Leave (FMLA), and bereavement.

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. Residents must work with preceptors to make up required learning opportunities missed while on PTO. It is advised that the resident not make flight arrangements until final approval for PTO is received. The resident is responsible for arranging coverage during their approved PTO time (e.g. regular scheduled staffing weekend). No time off requests will be accepted to cover the 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.

When a resident is ill and unable to report to work, the resident must notify the RPD at least 1 hour prior to the start of the day via phone or text message.

If a resident is ill and unable to work a staffing shift, the resident must follow the Pharmacist Sick Call Policy available on PolicyStat.

Procedure for PTO requests:

1. Discuss PTO or Comp Day request with preceptor for impacted rotation. If approved, proceed with steps 2 and 3.
2. Email RPD and request approval for PTO.
3. Once PTO is approved by RPD:

a. Enter PTO request in Kronos
b. Send an Outlook PTO reminder to the RPD (all day appointment, availability=free, reminder=none)

Holiday PTO

The resident will be eligible to take PTO in the month of December for the days they are not scheduled in the Holiday Block. 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.

Comp Days

The resident will be provided one comp day for each holiday worked. Residents may schedule their comp day in coordination with their rotation preceptor and by informing the RPD via Outlook appointment of the date.

Special Events and Exceptions

Residents are required to notify the Pharmacist Scheduler of special dates including: ASHP Midyear, MSHP/KCHP (when applicable), and Midwest Pharmacy Residency Conference (or equivalent) along with other departmental function dates (i.e. residency banquet) as soon as those dates are made available.

The Pharmacist Scheduler will adjust your weekend to support your attendance at these events and allow you to fulfill your practice commitment at re-scheduled time chosen by the Pharmacist Scheduler.

XIV.   Procedure for Resident Selection

Deadline for application will be determined annually and will occur during the first week in January of the residency year in which the candidate is applying. Refer to the Pharmacy Department PYG1 & PGY2 Programs Residency Manual for details regarding application requirements.

Candidates must possess a Doctor of Pharmacy degree, be a graduate of a college or school of pharmacy accredited by the American Council of Pharmaceutical Education (ACPE) or have Foreign Pharmacy Graduate Equivalence Committee (FPGEC) certification from the National Association of Boards of Pharmacy (NABP). Candidates must have completed or be participating in an ASHP-accredited PGY1 residency program, or one in the ASHP accreditation process. Candidates with an ASHP sanctioned PGY1 exemption (vetting to be performed through screening in PhORCAS) with provided documentation are also eligible to for apply for the PGY2 training program. PGY1 program status will initially be reviewed at the time of application through PhORCAS. Upon starting of the residency, the resident will be required to provide proof of completion of PGY1 residency program in the form of a copy of their certificate of completion. This will be uploaded into the resident's folder.

The RPD will meet with interested candidates via virtual or in person meetings as part of MCM PPS. If candidates are not able to participate in an on-site meeting, interested candidates will be offered an alternative meeting venue. This meeting is an opportunity for the interested candidate to learn more about the program and whether it is a good fit for their career development needs.

Due to relatively low numbers of candidates, the RPD make every effort to accommodate on-site visits for all applicants if desired.   If the number of external candidate applications exceeds the number of candidates that will be brought on site for an interview, the MUSP RPD in conjuiction with MUSP RAC will evaluate the candidates to identify applicants with the ability to achieve the educational goals and objectives selected for the program and eligible candidates will be asked for an onsite interview. Remaining eligible candidates will be offered virtual interviews.

During the onsite interview, external candidates will interview with the RPD, current resident, pharmacy department leadership, members of the interdisciplinary teams they would work closely with during their PGY-2 year, and preceptors. The candidates will be evaluated on various characteristics and traits specific to their personal conduct during the interview sessions. Each interviewer will complete an evaluation for assessing the residency candidate during the interview process which will be used to determine a preliminary ASHP Match rank-list order. The PGY2 MUSP RPD , current resident, and other appropriate members of the interview team as determined by the RPD will meet to discuss candidate(s) for the residency and determine a rank-list. The final rank-list order is then determined and submitted by the RPD based upon on the discussion and results from the interview evaluation scores and input from the above meeting.

XV.   Residency Project / Research

Project Overview

The resident is required to complete a self-directed research project in order to demonstrate proficiency in clinical research. The project should be directed at enhancing personal and professional growth while benefiting the pharmacy department through cost savings initiatives and/or innovative changes in pharmacy practice. All projects shall be directed toward useful outcomes and not merely be an academic exercise for the sole purpose of satisfying this requirement. The scope, magnitude and type of project may vary according to individual interests and must be completed in a manner suitable for presentation/publication. Project presentations will be in the form of a poster presentation and/or verbal presentation at a professional society meeting, residency conference, or other designated meeting. A final written manuscript in a format/state suitable for submission for publication is required to be submitted prior to the end of the residency year in order to meet the requirements of the residency program. The manuscript should follow the guidelines and requirements for the submission of manuscripts established by the anticipated journal of submission (i.e. *Hospital Pharmacy*, *American Journal of Health-System Pharmacists* or other peer reviewed journal). The RPD/RPC will be responsible for determining whether or not the manuscript meets these standards.

The resident will collaborate with and gain approval from the RPD/RPC on their residency project. The RPD or RPC will serve as the "primary research associate" and project preceptor or

co-investigator throughout the year. Additional preceptor or 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.

A formal research protocol, with any supporting documents, must be submitted to the RPD/RPC for evaluation and approval. Other preceptors, at the discretion of the RPD/RPC, may also be asked to evaluate the protocol for feasibility. The resident and all preceptors or co-investigators are required to complete online IRB and associated IHI (Institute for Healthcare Improvement) training. The certificate of completion should be submitted with the protocol. The 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), 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 resident will develop a project timeline for achievement of milestones to ensure completion of the project to present at appropriate forum(s) as agreed upon with preceptors. Anticipated failure to meet deadlines for the interim steps should be proactively discussed with the project's primary preceptor. 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.

Research Project Goals:
- Expose the resident to the mechanics of research methodology
- Afford the resident experience in directing and conducting an original research project from beginning to end
- Teach the resident how to submit a poster presentation at a national meeting
- Demonstrate the process of manuscript creation for publication in a peer-reviewed pharmaceutical or medical journal
- Promote research in pharmacy practice which critically evaluates some aspect of pharmacy practice
- Develop new and innovative approaches to managing drug and biological therapies for improving patient care and/or managing costs

See *Appendix A* for Research Project Timeline Example
See *Appendix B* for Research Project Proposal Form Example

XVI. Resident Documents

Residents are expected to save all residency related documents in appropriate locations on the Pharmacy Share Drive, One Drive, and PharmAcademic. Documents include but are not limited to: projects, 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.

XVII. Exit Survey

Prior to the completion of the residency program, the resident will meet with the RPD to share feedback and will be required to complete an exit survey to be considered for improvement of the program.

Appendix A: Research Project Timeline Example

Due Date	Item Due
7/29/23	1st draft of project protocol should contain a primary literature evaluation and study outcomes table. Keep this for your background.
8/5/23	Written feedback due from Project Preceptor
8/12/23	2nd draft of project protocol presented to RPD *verbally*
8/19/23	IRB admin certification form signed by administrator; identify journal for publication
8/26/23	Protocol submission to IRB/HSC (required, even for quality improvement projects)
9/2/23	1st draft of slides for GKC Research Day
9/9/23	Final draft of slides for GKC Research Day
10/6/23	Perform data collection on 5 patients using data collection tool and time yourself. Revise tool based on experience. Preceptor to validate data collection.
10/13/23	Collect data on additional 5 patients using data collection tool; revise tool based on experience. Preceptor to validate data collection.
10/20/23	Collect data on additional 5 patents; finalize data collection tool. Calculate estimated data collection time (x1.5).
10/27/23	Start data collection.
11/10/23	1st draft of background section with formatting for targeted journal.
11/17/23	2nd draft of background section for targeted journal.
11/22/23	Data collection goal=10%
12/1/23	Data collection goal=20%
12/8/23	Data collection goal=30%
12/15/23	Data collection goal=40%
1/8/24	Data collection goal=50%
1/15/24	Data collection goal=60% 1st draft of methods section with formatting for targeted journal (include background in submission).
1/22/24	Data collection goal=70% 2nd draft of methods section with formatting for targeted journal (include background in submission).
1/29/24	Data collection goal=80% 1st draft of MPRC project abstract
2/5/24	Data collection goal=90% 2st draft of MPRC project abstract
2/12/24	Data collection for project must be finalized, schedule meeting with statistician if applicable to discuss what format that data should be prepared for analysis
2/26/24	2nd draft of slides to preceptor
3/30/24	Practice presentation with preceptor
4/27/24	Finalized MPRC slides due
6/1/24	1st draft of manuscript completed
6/15/24	2nd draft of manuscript completed
6/30/24	Finalized manuscript
7/3/24	Manuscript approval notification by RPD (PASS/FAIL)
7/5/24	Manuscript submitted for publication.

Appendix B: Research Project Proposal Example

Project Title: _____

Primary Investigator (preceptor): _____

Co-Investigators (includes resident): _____

Study Site: _____

Protocol Version: _____   Protocol Date: _____

Background - state clearly and concisely the rationale for the project and summarize any relevant literature to support this proposal.

Rationale - state clearly and concisely the purpose for the research. Depending on the nature of the work, various areas may be addressed. For example, the necessity for the project, contributions to the relevant literature, impact on pharmacy practice, or other relevant purpose may be identified.

Hypothesis – expected outcome of data.

Study objectives - provide concise statements of what primary and secondary endpoints are being evaluated.

Methods - discuss the procedures for completion of the project. Provide a specific plan for meeting each stated objective. Discuss the research design, data collection methods, statistical review and analysis. Include how the patients will be identified, what source will the data be extracted from, and who extract data if not resident. Define a target population via inclusion/exclusion criteria, and estimated number of study patients (with justification), time period of data collection, etc.

Statistical analysis – description of statistical tests used for analysis of data.

Funding (if applicable) – provide an itemized estimate of the project costs including any supplies, drugs, additional personnel, laboratory charges, equipment or any other anticipated research costs.

Limitations – discuss limitations/shortfalls of proposed outcomes.

IT requirements and name of IT staff approving project *(omit this section after prior to IRB/HSC submission).*

References