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PGY1 & PGY2 Pharmacy Residency Programs Manual 2023-2024

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Residency Purpose Statement

PGY1 pharmacy residency programs build on Doctor of Pharmacy (PharmD) education and outcomes to contribute to the development of clinical pharmacists responsible for medication-related care of patients with a wide range of conditions, eligible for board certification, and eligible for postgraduate year two (PGY2) pharmacy residency training.

PGY2 pharmacy residency programs build on Doctor of Pharmacy (PharmD) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide 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 an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification, if available.

Program Overview

The PGY1 and PGY2 Pharmacy Residencies at UCHealth Memorial Hospital provide the resident with the skills and knowledge required to become a competent pharmacy practitioner or clinical pharmacy specialist.

The PGY1 program is a twelve-month, postgraduate training experience composed of five competency areas: 1) patient care; 2) advancing practice and improving patient care; 3) leadership and management; 4) teaching, education, and dissemination of knowledge; and 5) management of medical emergencies.

The PGY2 Oncology program (if available) is a twelve-month, postgraduate training experience composed of six competency areas: 1) patient care 2) advancing practice and improving patient care 3) leadership and management; 4) teaching, education, and dissemination of knowledge; 5) oncology investigational drugs; and 6) publishing.

The PGY2 Critical Care program is a twelve-month, postgraduate training experience composed of four competency areas: 1) patient care 2) advancing practice and improving patient care 3) leadership and management; and 4) teaching, education, and dissemination of knowledge.

The specific program for each resident varies based upon the residents' goals, interests, and previous experience. However, all residents are required to complete rotations in core subject areas considered to be essential to the pharmacy practitioner/clinical pharmacy specialist. A broad range of elective rotations are available to permit the resident flexibility in pursuing additional goals. Additional learning experiences aimed at producing a well-rounded pharmacist include the development and completion of a major project relating to pharmacy practice, development of oral and written communication skills, patient education, participation in various departmental administration committees, and practice in various pharmacy areas throughout the hospital. Upon successful completion of the program, trainees are awarded a residency certificate.

UCHealth Pharmacy Mission and Vision

Mission

UCHealth Pharmacy improves lives every day with extraordinary CARE

Collaboration Accuracy Respect Excellence

Vision

Always leading through our trusted expertise, exceptional outcomes and innovative patient-centric approach.

Administration of the Program

Consistent with the commitment of the hospital and the Department of Pharmacy, a number of individuals play a key role in the administration of the pharmacy residency programs. The Director of Pharmacy has ultimate responsibility for the residency programs. This is accomplished with the assistance of the Residency Program Directors and the members of the Residency Advisory Committees (RAC).

Residency Program Director (RPD)

Pharmacist responsible for the direction, conduct, and oversight of the residency program. Ensures that the program goals and objectives are met, training schedules are maintained, appropriate preceptorship for each rotation period is provided, and that resident evaluations are conducted routinely and based on pre-established learning objectives.

Residency Program Coordinator

Pharmacist who works with the RPD to ensure the direction, conduct, and oversight of the residency program.

Preceptor

Each rotation has a pharmacist preceptor who develops and guides the learning experiences to meet the residency program's goals and objectives, and with consideration of the resident's goals, interests and skills. The preceptor periodically reviews the resident's performance, with a final written evaluation at the conclusion of the learning experience.

Preceptor-in-training

Pharmacists who are new to precepting residents who have not yet met the qualification for a preceptor by ASHP Standards.

Facilitator

Each resident is assigned a preceptor to be their facilitator to advise the resident throughout the year. The facilitator is assigned by the RPD and RAC and may be chosen from the clinical or administrative staff, is ideally PGY1 trained, and has practiced at Memorial Hospital for at least one year. Facilitators review the resident's broad plan and assist them in developing a program of development for the year. On a quarterly basis, the facilitator reviews the resident's progress, and together with the resident, makes modifications in the resident development plan. This meeting should be done in person. The facilitator also guides the resident as they select their project, to find preceptors to assist them with their presentations, and to guide them in career choices.

Project Advisor (Research Project)

The project advisor assumes primary responsibility to guide the resident in completing the required project. The project advisor may assist the resident in their project selection. Additionally, the advisor assists in defining the scope of the project to assure completion within the time frame of the residency year and planning and implementing the project design. PGY1 residents are required to present the results of their project(s) at ASHP Midyear Clinical Meeting / Vizient University Health System Consortium Pharmacy Network Meeting (if available) and/or the Mountain States Residency Conference or other conference as deemed appropriate by the RPD and Director of Pharmacy (as applicable per project timeline). PGY2 residents are required to present the results of their project(s) at ASHP Midyear Clinical Meeting / Vizient

University Health System Consortium Pharmacy Network Meeting (if available) and/or the Mountain States Residency Conference or other conference as deemed appropriate by the RPD and Director of Pharmacy (as applicable per project timeline). Residents are invited to submit their project for publication at the ASHP Summer Meeting, Society of Critical Care Medicine Meeting, Hematology Oncology Pharmacists Association Meeting or other meetings as deemed appropriate by the Project Advisor and Research Committee. The project advisor provides guidance concerning the suitability for publication of the research work. Decisions concerning submission should be reviewed for final approval with the resident's program director.

Grand Rounds Advisor

Selected by the resident and agreed to by the advisor, assumes primary responsibility to guide the resident in completing the required grand rounds presentation. The grand rounds advisor assists the resident in selecting a topic, developing objectives, completing ACPE credit paperwork, and ensuring the resident is prepared for their presentation through slide review and practice presentations.

Residency Advisory Committee (RAC)

Standing committee composed of residency preceptors and clinical pharmacists. The committee serves in an advisory capacity to the Director of Pharmacy and RPD and seeks to maintain and improve the quality and consistency of the residency program. The committee provides a forum for all preceptors to discuss common concerns, to develop additional learning experiences, and to promote new and innovative areas of practice. The RPD serves as the Chair of the committee which meets on a monthly basis, at a minimum (with the exception of the PGY2 Oncology RAC meets quarterly, at a minimum). The PGY2 resident may attend the PGY2 RAC meetings as determined by the RPD. The specific functions of the committee include:

- Continuous evaluation of the curriculum, goals and objectives
- Quarterly evaluation of the residents' progress
- Evaluation and support of residency projects
- Resident recruitment and selection
- Develop and maintain a robust preceptor group through preceptor development initiatives

- RAC will also include four subcommittees that are composed of individual RAC members. The subcommittees serve for specific functions of the committees (see below), as well as promote engagement and collaboration between RAC, RPD and residency coordinator. Subcommittees shall meet quarterly, at a minimum, and provide guidance and recommendations to the RPD and RAC for the residency program. A status report will be presented to the RAC at least quarterly, but more often as needed. Any issues identified by the subcommittee shall be addressed by the RPD and handled on a case by case basis. The RPD may add or remove members from the subcommittee at any time.

Specific functions of the subcommittees include:

A. Subcommittee: Research
   - Solicit research proposals from preceptors and staff no later than April
   - Review and edit research proposals (i.e. idea submissions form)
   - Validate feasibility or research proposals for presentation to the incoming residents
   - Present project ideas to the incoming residents
   - Provide continued support to the residents as needed throughout the year (not to serve as the resident's research committee)
   - The subcommittee is composed of at least three members appointed to renewable one-year terms. Members are appointed in May or June of the residency year.

B. Subcommittee: Preceptor Development
   - Create and implement a preceptor development plan for the PGY1 and PGY2 residency programs
   - It is the responsibility of the sub-committee to determine which activities will be offered for preceptor development, examples of options include:
     - One-hour CE sessions quarterly to monthly utilizing ASHP or college of pharmacy resources
     - Preceptor-led discussions on a selection of topics
     - Readings to be completed on own and/or discussed in-person
     - Adding 10-15-minute preceptor development sessions/pearls to RAC each month
   - Preceptor development strategies will be discussed again at the end of the year continuous program improvement session
   - Facilitate pharmacists for Pharmacy Grand Rounds
     - The committee does not have to give these presentations, but is responsible for discussing with pharmacists who would be able to present and providing the name to the PGY1 RPD for scheduling.
   - The subcommittee is composed of at least three members appointed to renewable one-year terms. Members are appointed in May or June of the residency year.

C. Subcommittee: Recruitment & Interview
   - Develop and implement recruitment, candidate application, candidate selection and interview processes
   - Coordinate on-site and virtual interview schedule for residents, members and candidates in conjunction with RPD
   - Collect and interpret interview feedback annually
     - Proposed changes to be presented at RAC meeting in September or October of the residency year.
   - The subcommittee is composed of at least three members appointed to renewable one-year terms. Members are appointed in May or June of the residency year.
     - Subcommittee members may invite additional members who are directly involved in the residency interview process to participate in the subcommittee, as needed

D. Subcommittee: Social
   - Coordinate at least 1 social activity for the preceptors and residents per quarter
   - Facilitate preceptor and resident morale throughout the year to reduce burnout and promote well being
   - The subcommittee is composed of the PGY1 residents

Preceptor Selection and Appointment

The RPD for each program is responsible for the selection, appointment, and development of the preceptors. The selection process is as follows:

- Preceptor expresses interest to RPD.
- Preceptor completes the "Initial Preceptor Evaluation" form for the respective program and submits to the RPD. The form includes the required preceptor eligibility requirements and qualifications, preceptor development activities over the past year, and a section for RPD comments.
- Preceptor completes the "Preceptor Academic and Professional Record" and submits to the RPD.
- RPD evaluates the preceptor submission, asking for clarification as needed, and determines preceptor eligibility.
- RPD will provide the preceptor with a Preceptor Appointment Letter outlining the duration of appointment and further information.

Annual Preceptor Evaluation

Each year, the preceptor will complete the Preceptor Evaluation Form and update their ASHP Academic and Professional Form. These documents are due by the end of the residency year, and a minimum of one week prior to the Continuous Quality Improvement Meeting. The RPD will review the submitted documentation as well as PharmAcademic evaluations to assess the preceptor's performance. This information may be shared with the preceptor's manager for incorporation into the hospital Annual Performance evaluations.

Preceptor Development

Preceptor development will span all residency programs at Memorial Hospital. A preceptor development needs assessment will be completed in the first quarter of each residency year to identify the optimal approach for preceptors involved in the program. Examples of options to discuss are:

- One-hour CE sessions quarterly to monthly utilizing ASHP or college of pharmacy resources
- Preceptor-led discussions on a selection of topics
- Readings to be completed on own and/or discussed in-person
- Adding 10-15 minute preceptor development sessions/pearls to RAC each month
- Other ideas as expressed by the group

Preceptor development strategies will be discussed again at the end of the year Continuous Quality Improvement Meeting scheduled in May or June of the residency year.

Rotations

Organized rotations provide the structure of resident training in specialized areas of pharmacy practice. The resident is expected to consider the goals and objectives for each rotation as a foundation for their experience. Residents are expected to perform independently and demonstrate proficiency in each rotation. The residency preceptor provides guidance and assistance to the resident, and ensures that the goals set forth by the resident and the program are met. The preceptor also provides the resident with frequent evaluation of their progress, including a written evaluation at the conclusion of the rotation.

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 rotation. Residents shall also prepare for topic discussions, read materials in a timely manner, and perform other tasks assigned by the preceptor.

One week prior to the start of each rotation, the resident will contact the rotation preceptor to arrange for a pre-rotation meeting or determination of when items for rotations will be discussed. At this meeting, the resident will provide the preceptor a schedule or list of meetings and other commitments the resident has for the rotation that will require time away from the rotation. Issues that may be discussed at this meeting include, but are not limited to: starting time each day, rotation expectations, specific goals the resident has for the rotation, specific goals the preceptor has for the resident to accomplish, readings to be done prior to the rotation, scheduling of a verbal or informal mid-point and written end of rotation evaluation.

Rotation Schedule

A 12-month schedule of the resident rotations provides a framework for structured learning activities. Each rotation will be 1 month long with exceptions noted for each program. The resident and their facilitator will meet at the beginning of the year to form a resident development plan. This plan is presented to the RAC for review, and to the RPD for approval. Within the first month of the program, all residents and their RPD will meet to develop a 12-month schedule of rotations for each resident. Daily working hours while on rotation are determined by the rotation preceptor based on the needs of the rotation/patient care unit.

Schedule Changes

As the resident acquires additional knowledge and learning experiences, their goals may change. Residents may request to change or trade scheduled rotations. Documentation of resident's intent to change rotations and approval from preceptors involved should be submitted to RPD via email no less than 2 months prior to the start of the rotation.

PGY1 Rotations

Required Rotations – 1 month

- Orientation: June – July (6-7 weeks)
- Critical Care Required (Medical ICU or Surgical-Trauma ICU)
- Internal Medicine
- Emergency Medicine
- Practice Management
- Infectious Disease
- Research Month: December
- Precepting – will be done concurrently with a required or elective rotation based on student rotation availability

Longitudinal Required Rotations – 1 year

- Pharmacy Practice (Staffing)
- Research Project
- Clinical Practice Management

Elective Rotations– 1 month

The following elective rotations are available: ([&] see LED for prerequisites)

- Women's Health
- Inpatient Oncology[&]
- Outpatient Oncology
- Cardiac Surgery [&]
- Critical Care Elective (Medical ICU or Surgical-Trauma ICU)[&]
- Investigational Drug Service
- Operational Management
- Potential Offsite Rotations

PGY2 Critical Care Rotations

Required Rotations

- Orientation (July)
- Medical ICU I and II (2 months)
- Surgical/Trauma ICU (1 month)
- Emergency Medicine I and II (2 months)
- Neuro ICU (1 month)
- Cardiothoracic Surgery ICU (1 month)
- Research and medical writing (1 month)
- Precepting – will be done concurrently with a required or elective rotation based on student/PGY1 rotation availability

Longitudinal Required Rotations – 1 year

- Pharmacy Practice (Staffing)
- Research Project
- Practice Management

Elective Rotations - 1 month (3 selected):

- Infectious Disease
- Toxicology (Rocky Mountain Poison & Drug Center)
- Burn ICU (University of CO Hospital)
- Hematopoietic Stem Cell Transplantation (University of Colorado Hospital)
- Abdominal Transplant (University of Colorado Hospital)
- Emergency Medicine Overnights
- Repeat of required rotation (ex: Surgical/Trauma ICU 2)
- Potential Offsite rotations (if available)

PGY2 Oncology Rotations (if program available)

Required Rotations

- Orientation (July)
- Ambulatory Oncology (2 months)
- Inpatient Oncology (2 months)
- Gynecologic Oncology (2 weeks)
- Hematologic Malignancies (1 month)
- Hematopoietic Stem Cell Transplantation (1 month)
- Investigational Drug Service (1 month)
- Research Month (December)

Longitudinal Required Rotations – 1 year

- Pharmacy Practice (Staffing)
- Research and Medical Writing
- Precepting/Teaching
- Clinical Practice Management

Elective Rotations – variable length

- Offsite rotations based on resident interest
- Palliative Care
- Radiation Oncology
- Repeat of required rotations

Resident Development Plan Procedure

ASHP Accreditation Standard 3.3 states that each resident must have a development plan documented by the RPD or designee. Resident progress will be assessed at least quarterly.

The facilitator serves as a mentor for the individual resident and provides assistance to the resident in formulating individual achievable program goals. Facilitators will review the resident's broad plan and assist them in developing a resident development plan for the year. The facilitator may attend the rotation evaluations to provide consistency throughout the year, which should help to identify any problems at an early stage. On a quarterly basis, the facilitator will review the residents' progress, and, together with the resident, make modifications in the resident development plan.

ASHP Entering Interests Form and Objective-Based Entering Interests Form

The ASHP Entering Interests form collects baseline information for use in the development of individualized educational goals and objectives for the upcoming residency year. The form asks residents to write a narrative addressing the following topics: career goals; current practice interests; strengths; weaknesses; three goals to accomplish during residency; activities that have contributed to skills in written communication, verbal communication, public speaking, time management and supervision; areas of concentration during the residency; ideal frequency and type of preceptor interaction; strategy for life-long continuing education; and role of professional organizations. The Goal-Based Residency Evaluation form collects baseline information for use in the development of individualized educational goals and objectives for the upcoming year in the residency. The form asks residents to self-evaluate on all of the program's outcomes and goals.

Each form is only delivered once as part of the resident enrollment at the beginning of the residency year. Residents will complete the forms at the beginning of the residency year, prior to the July or August RAC Meeting, as directed by their RPD.

Facilitators will review the forms prior to the July or August RAC Meeting and enter comments into PharmAcademic. The ASHP standard requests a 'rich narrative'. Residents will have identified a number of areas where improvement is desired based on the topics reviewed. Facilitators should explain how each topic will be addressed within the residency program.

The RPD will review the forms and Facilitator comments (if applicable) prior to the July or August RAC Meeting and will add their own rich narrative. It is expected that facilitators would have developed a strategy to facilitate achievement of goals. The RPD will provide a summary of the plan versus simply indicating 'no additional comments' or 'agree.'

Resident Development Plan (Subsequent quarterly review)

ASHP requires the Resident Development Plan to be reviewed quarterly. PharmAcademic provides a reminder to do this. The Resident Development Plan is where 1) the RPD determines which goals the resident has achieved for the residency program with the assistance of the RAC and 2) where a narrative is to be written relating to

customizing the plan for the resident, as it relates to the initial plan. This narrative should include 1) comments on resident progress, 2) suggestions for improvement and 3) any changes to the plan from the previous quarter.

The Facilitator and Resident will each write a rich narrative that details the resident's progress and any changes to the resident's initial plan. This may include rotation changes, attending a class or conference, or other activity to meet the change in plan. The RPD will review the facilitator (if applicable) and residents quarterly update, in addition to providing the RPD's own narrative. The facilitator will also review the goals and objectives for the resident on a quarterly basis. In conjunction with the resident's preceptors for that quarter, the facilitator will recommend which goals and objectives have been achieved for the residency. The RPD will review the recommendations and mark the achievement in PharmAcademic.

RAC Presentation of Progress and Development Plans

The PGY1 and PGY2 residents will present their progress at RAC, to include a quarterly presentation of their development plan, at a minimum. Following the resident's presentation of their plan, the resident will exit the RAC meeting. The preceptors will have a closed session to discuss any information presented or missed during the resident's presentation of their development plan as well as discuss and goals and objectives to be achieved for the residency.

Curriculum Vitae (CV)

Residents are to provide a current copy of their curriculum vitae to their facilitator prior to the July or August RAC Meeting. The Resident should save their initial CV in their Electronic Residency Binder and to PharmAcademic. At the end of the residency year, the Resident should save their final CV in their Electronic Residency Binder and to PharmAcademic.

Quarterly Development Plan RAC Presentation (Suggested Scripting / Timeline)

Start of the Residency Year (Presented during July / August RAC) ~ 10 minutes

- Areas of Interest
- Resident identified strengths
- Resident identified weaknesses
- Residents selected rotation schedule for the first quarter
- Name 2 opportunities for preceptors during the first quarter

First Quarter Training Plan (Presented during September / October RAC) ~ 7 minutes

- Changes to resident identified strengths
- Changes to resident identified weaknesses
- Residents selected rotation schedule for the second quarter
- Name 2 opportunities for preceptors during the second quarter
- Updates on Research Project, Grand Rounds, if applicable

Second Quarter Training Plan (Presented during December / January RAC) ~ 7 minutes

- Changes to resident identified strengths
- Changes to resident identified weaknesses
- Residents selected rotation schedule for the third quarter
- Name 2 opportunities for preceptors during the third quarter
- Updates on Research Project, Grand Rounds, if applicable

Third Quarter Training Plan (Presented during March / April RAC) ~ 7 minutes

- Changes to resident identified strengths
- Changes to resident identified weaknesses
- Residents selected rotation schedule for the fourth quarter
- Name 2 opportunities s for preceptors during the fourth quarter
- Updates on Research Project, Grand Rounds, post-residency plans, if applicable

Fourth Quarter / End of Residency Training Plan (Presented during last June RAC) ~ 5 minutes

- Any outstanding residency requirements
- Update on post-residency plans

Evaluation Methods

The pharmacy residency offers the resident opportunities to obtain the skills and knowledge required to become a competent pharmacy practitioner. The specific program for each resident varies based upon interests and goals. During the year, the residents will be evaluated by rotation preceptors, the RPD, the Pharmacy Director, and themselves.

The resident will meet with the rotation preceptor prior to the start of each new rotation, primarily to discuss and customize the rotation's goals and objectives so as to meet the specific needs of the resident. During the rotation, the resident meets with the preceptor on a regularly scheduled basis, as determined by the preceptor and resident. Any additional modifications to the rotation or its goals and objectives are also discussed.

On the last day of rotation, the resident again meets with the preceptor for evaluation purposes. The following evaluations are required to be completed for each rotation. Evaluations are due the last day of the rotation unless otherwise specified by the preceptor. For extenuating circumstances, the RPD should be contacted to modify the PharmAcademic evaluation due date. The preceptor may provide additional feedback throughout the rotation in a verbal or written manner.

Evaluation	Evaluator	Evaluated	Due
Summative Evaluation	Resident	Resident (self-assessment)	Last day of the rotation
Summative Evaluation	Preceptor	Resident	Last day of the rotation
ASHP Learning Experience Evaluation	Resident	Learning Experience	Last day of the rotation
ASHP Preceptor Evaluation	Resident	Preceptor	Last day of the rotation

The facilitator may attend the monthly rotation evaluations to provide consistency throughout the year. This will also help to identify any problems at an early stage. All evaluations will be based on learning objectives. All resident and rotation evaluations must be in written form and included in PharmAcademic.

Self-assessments are to be completed independently, prior to preceptor, facilitator, or RPD review. Evaluations in PharmAcademic are available to the facilitator, rotation preceptor, and the RAC. Resident progress on program objectives will be evaluated using the ASHP Learning Experience Scale of 'Achieved', 'Satisfactory Progress' and 'Needs Improvement'. Definitions of each of these components are listed in the table on the next page. Preceptors are to use these definitions on learning experience evaluations and residents are to use these definitions when completing self-assessments.

Definitions of Scores Used in Learning Experience Evaluations

Each rating should have accurate and objective comments documented within the evaluation that provide an explanation for the chosen rating

NI = Needs Improvement	The resident's level of skill on the goal does not meet the preceptor's standards of either "Achieved" or "Satisfactory Progress". This means the resident could not: ● Complete tasks or assignments without complete guidance from start to finish, OR ● The resident could not gather even basic information to answer general patient care questions, OR ● Other unprofessional actions can be used to determine that the resident needs improvement. This should only be given if the resident did not improve to the level of residency training to date before the end of the rotation. The rating of NI will trigger a meeting between the RPD and resident to discuss any changes that need to be made to the program and/or resident schedule to ensure progress. The facilitator and/or management may be asked to join if determined necessary. Examples: Resident recommendations are always incomplete and poorly researched and/or lack appropriate data to justify making changes in patient's medication regimen. Resident consistently requires preceptor prompting to communicate recommendations to members of the healthcare team, and/ or to follow up on issues related to patient care.
SP = Satisfactory Progress	This applies to a goal whose mastery requires skill development in more than one learning experience. In the current experience the resident has progressed at the required rate to attain full mastery by the end of the residency program. This means the resident can: ● Perform most activities with guidance but can complete the requirements without significant input from the preceptor. ● There is evidence of improvement during the rotation, even if it is not complete mastery of the task. There is a possibility the resident can receive NI on future rotations in the same goal in which SP was received if the resident does not perform at least at the same level as previously noted. Examples: Resident is able to consistently answer questions of the healthcare team and provide concise and complete response with minimal preceptor prompting or assistance. An area where the resident can focus on continued development would be to work on anticipating the needs of the healthcare team during patient rounds. Resident is able to make recommendations to the team without preceptor prompting when recommendations are straightforward and well received. Resident sometimes struggles with more complex recommendations and tackling difficult interactions. Encourage resident to continue to identify supporting evidence for recommendations to assist in difficult interactions.
ACH = Achieved	The resident has fully mastered the goal for the level of residency training to date. This means that the resident has consistently performed the task or expectation without guidance. Examples: Resident's recommendations are always complete with appropriate data and evidence to support medication related adjustments in therapy. This is achieved without preceptor prompting. Resident consistently makes an effort to teach members of the healthcare team his/ her rationale for therapy recommendations
ACHR = Achieved for the Residency	The resident's Facilitator, RAC, and RPD will collaborate throughout the residency year to determine if the resident has demonstrated consistency between learning experience evaluations of goals and objectives. This means that the resident can consistently perform the task or has fully mastered the goal for the level of residency training to date and performed this task consistently in various learning experiences. At such time, the RPD has the ability to mark the resident as "ACHR". This means that the resident no longer needs to be evaluated on this goal, but that any preceptor has the opportunity to provide additional feedback as necessary.

Programmatic Continuous Quality Improvement

As we strive to further the resident's development, the residency program will strive to continue its development and ability to optimally train residents. This will be conducted throughout the year and as a formal exit interview at the end of each residency year.

The RPD will have regular scheduled meetings with the resident(s) to discuss resident progress, provide updates regarding deadlines, and to solicit feedback from the residents. As able, this feedback will be discussed at RAC and implemented in the current residency year.

Exit Interview

At the end of each residency year, the RPD will have a 2-hour exit interview to review the program from the resident's perspective, with a focus on changes that can be implemented or considered for future residency years. The RPD will then compile the resident feedback in a de-identified document to maintain resident confidentiality for distribution and discussion with the RAC.

- Rotation specific feedback will be sent to the specific residency preceptor. The RPD will consider this feedback during the annual preceptor evaluation process.

Exit interview feedback will be reviewed at the Continuous Quality Improvement meeting for discussion and decision regarding programmatic changes. This session will include preceptor feedback and ideas for improvement. These changes will be documented in RAC minutes.

Teaching Certificate

Participation in the Colorado Pharmacy Residency Teaching Certificate Program (CPRTC) is an optional benefit provided to UCHealth - Memorial Hospital Residents. CPRTC is administered through the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences.

Program Goal

To provide an opportunity to enhance teaching skills through practical training and actual hands on teaching experience both in the university setting as well as the clinical practice setting. A focus will be placed on both classroom and clinical practice teaching/precepting. The teaching certificate program should not be considered the equivalent of more in depth training that can be attained with PGY2 residency or fellowship training. Rather, graduates of the program should feel comfortable with designing and implementing educational programs within the clinical practice environment, as well as gain adequate exposure to consider if a career in academia is desired. The Teaching Certificate is awarded to participants that successfully complete the program requirements.

Program Outcomes

1. The program participant will be able to demonstrate their expanded knowledge in a variety of instructional settings.
2. The program participant will possess an extensive teaching skill set to utilize in both the classroom and clinical setting
3. The program participant will be able to create a teaching portfolio following completion of required experiences.

The CPRTC will consist of attendance at regularly scheduled workshops, hands-on teaching experiences, and the creation of a teaching portfolio.

Workshops will be held monthly at the School of Pharmacy in Denver from 5:30 – 7 pm or as defined by the course instructors. Residents will be permitted to leave Memorial Hospital at 2:30 pm on the days of their monthly workshop to allow for travel time. This must be communicated in advance to the rotation preceptor. Mileage may be submitted to the department for reimbursement, however residents are encouraged to carpool to the workshops.

Additional information will be provided with regards to the CRPTC will be provided prior to the first workshop.

PGY1 Pharmacy Residency Electronic Residency Portfolio

Each resident will collect their accomplishments throughout the year and organize electronically. The electronic file may be created on your personal drive or on the pharmacy share drive. The resident is expected to appropriately and clearly label all documents. At the end of the year, the file must be transferred to the Pharmacy Share Drive > PGY1 Residency > Residency Binder as well as emailed directly to the Program Director. The file should follow this format:

- Title: [first name] [last name] Residency Binder [year – year]

- Folders:
    1. Professional Info
        - CV from the beginning of residency
        - CV from the end of residency
        - Offer Letter (Initial and Signed Copy)
        - State Pharmacist License
        - ACLS, BLS Certifications
        - CITI Training Certificate(s)
        - C2 Safe Training Certificate
        - ACPE Immunization Certificate (if applicable)
        - Duty Hours Acknowledgement
        - Residency Manual Receipt Acknowledgement
        - Orientation to Residency Checklist

    2. Development Plan
        - ASHP Entering Interests (downloaded from PharmAcademic)
        - Entering Objective-Based Self Evaluation (downloaded from PharmAcademic)
        - Quarterly Resident Development Plans (downloaded from PharmAcademic)
        - Resident Graduation Checklist

    3. Rotations, Presentations, Projects And Evaluations (sub-folders to include)
        - MUE
            - MUE proposal
            - Final MUE
        - Grand Rounds
            - Final draft
            - Evaluations
            - ACPE Information
        - Rotations (clinical)
            - Final draft of presentation
                - Include journal article if journal club presentation
            - Evaluations

- Any other projects completed during the rotation

4. Residency Project
    - Project proposal
    - Completed IRB Application
    - IRB approval confirmation
    - ASHP/Vizient Abstract (final)
    - ASHP/Vizient Poster (final)
    - MSC Abstract (final)
    - MSC Presentation (final)
    - MSC Handout (final)
    - MSC Evaluation
    - Implementation documents (as applicable)
    - Manuscript
    - Signed Manuscript Approval Letter from Advisor
    - Closure memo to IRB (and, if received, closure confirmation from IRB)

5. Teaching Certificate (include your teaching portfolio, if applicable)
    - Teaching Philosophy Statement
    - Teaching Experience
    - Teaching Reflection Statement
    - Teaching Materials
    - Evaluation Materials

6. Longitudinal Rotations (sub-folders to include)
    - P & T Committee
        - Monographs, Therapeutic Interchanges, Protocols/Procedures, Newsletters
        - Other materials worked on/created by the resident for P&T
    - Medication Safety Steering Committee (MSSC) for PGY1
        - Materials worked on/created by the resident for MSSC
    - Antimicrobial Stewardship (ASC) for PGY1
        - Materials worked on/created by the resident for ASC
    - Code response Evaluation Forms for PGY1

7. Miscellaneous
    - Newsletter/educational documents prepared
    - Any materials relating to the residency program which do not fit into the above categories

PGY2 Oncology Residency Electronic Residency Portfolio (if available)

Each resident will collect their accomplishments throughout the year and organize electronically. The electronic file may be created on your personal drive or on the pharmacy share drive. The resident is expected to appropriately and clearly label all documents. At the end of the year, the file must be transferred to the Pharmacy Share Drive > PGY2 Oncology Residency > Residency Binder as well as emailed directly to the Program Director. The file should follow this format:

- Title: [first name] [last name] Residency Binder [year – year]

- Folders:
    1. Professional Info
        - CV from the beginning of residency
        - CV from the end of residency
        - Offer Letter (Initial and Signed Copy) or Early Commitment Agreement
        - PGY1 Residency Certificate
        - State Pharmacist License
        - ACLS, BLS Certifications
        - CITI Training Certificate(s)
        - C2 Safe Training Certificate
        - ACPE Immunization Certificate (if applicable)
        - Duty Hours Acknowledgement
        - Residency Manual Receipt Acknowledgement
        - Orientation to Residency Checklist

    2. Development Plan
        - ASHP Entering Interests (downloaded from PharmAcademic)
        - Entering Objective-Based Self Evaluation (downloaded from PharmAcademic)
        - Quarterly Resident Development Plans (downloaded from PharmAcademic)
        - Resident Graduation Checklist

    3. Rotations, Presentations And Evaluations (sub-folders to include)
        - Grand Rounds
            - Final draft
            - Evaluations
            - ACPE Information
        - Rotations (clinical)
            - Final draft of presentation (Include journal article if journal club presentation)
            - Evaluations
            - Any other projects completed during the rotation
        - Weekly Residency Discussions
            - Final presentations

- Evaluations

4. Residency Project
    - Project proposal
    - Completed IRB Application
    - IRB approval confirmation
    - ASHP/Vizient Abstract (final)
    - ASHP/Vizient Poster (final)
    - HOPA Abstract (final)
    - HOPA Poster (final)
    - Implementation documents (as applicable)
    - Manuscript
    - Signed Manuscript Approval Letter from Advisor
    - Closure memo to IRB (and, if received, closure confirmation from IRB)

5. Teaching
    - Teaching Certificate (if applicable)
        - Teaching Philosophy Statement
        - Teaching Experience
        - Teaching Reflection Statement
        - Teaching Materials
        - Evaluation Materials
    - Oncology Elective Lecture
        - Final Presentation
        - Feedback/Evaluations

6. Longitudinal Rotations (sub-folders to include)
    - P & T Committee
        - Monographs, Therapeutic Interchanges, Protocols/Procedures, other materials
    - Leadership/Administration
        - EHR Protocols Validated
        - Newsletters
        - Other materials worked on/created by the resident
    - Oncology Appendix
        - Completed oncology appendix (downloaded from PharmAcademic)

7. Miscellaneous
    - Any materials which do not fit into the above categories

PGY2 Critical Care Residency Electronic Residency Portfolio

Each resident will collect their accomplishments throughout the year and organize electronically. The electronic file may be created on your personal drive or on the pharmacy share drive. The resident is expected to appropriately and clearly label all documents. At the end of the year, the file must be transferred to the Pharmacy Share Drive > PGY2 Critical Care Residency > Residency Binder as well as emailed directly to the Program Director. The file should follow this format:

- Title: [first name] [last name] Residency Binder [year – year]
- Folders:
    1. Professional Info
        - CV from the beginning of residency
        - CV from the end of residency
        - Offer Letter (Initial and Signed Copy) or Early Commitment Agreement
        - PGY1 Residency Certificate
        - State Pharmacist License
        - ACLS, BLS, PALS Certifications
        - CITI Training Certificate(s)
        - C2 Safe Training Certificate
        - Duty Hours Acknowledgement
        - Residency Manual Receipt Acknowledgement
        - Orientation to Residency Checklist

    2. Development Plan
        - ASHP Entering Interests (downloaded from PharmAcademic)
        - Entering Objective-Based Self Evaluation (downloaded from PharmAcademic)
        - Quarterly Resident Development Plans (downloaded from PharmAcademic)
        - Quarterly Resident Graduation Checklist

    3. Rotations, Presentations and Evaluations (sub-folders to include)
        - Grand Rounds
            - Final draft
            - Evaluations
            - ACPE Information
        - Rotations (clinical)
            - Final draft of presentation
                - Include journal article if journal club presentation
            - Evaluations
            - Any other projects completed during the rotation

    4. Residency Project
        - Project proposal

- Completed IRB Application
- IRB approval confirmation
- ASHP/Vizient Abstract (final), if applicable
- ASHP/Vizient Poster (final), if applicable
- MSC Abstract (final)
- MSC Presentation (final)
- MSC Handout (final)
- MSC Evaluation
- Implementation documents (as applicable)
- Manuscript
- Signed Manuscript Approval Letter from Advisor
- Closure memo to IRB (and, if received, closure confirmation from IRB)

5. Teaching Certificate (include your teaching portfolio, if applicable)
    - Teaching Philosophy Statement
    - Teaching Experience
    - Teaching Reflection Statement
    - Teaching Materials
    - Evaluation Materials

6. Longitudinal Rotations (sub-folders to include)
    - P & T Committee
        - Monographs, Therapeutic Interchanges, Protocols/Procedures, Newsletters
        - Other materials worked on/created by the resident for P&T
    - Critical Care Section or other meetings
        - Materials worked on/created by the resident for Critical Care Section or other applicable meetings
    - Leadership/Administration
        - Materials worked on/created by the resident for monthly leadership meetings
        - Medication Use Evaluation (MUE)
        - Quarterly ICU Newsletters
    - Teaching for PGY2 Programs
        - Materials for elective courses taught at University of CO, if applicable
    - Additional Research Projects (ex. Trauma research project documents, if available)
    - Critical Care Appendix/Disease State Management Form (downloaded from PharmAcademic and/or form uploaded and signed off)

7. Miscellaneous
    - Nursing or other educational documents prepared
    - Any materials relating to the residency program which do not fit into the above categories

Pharmacy Practice (Staffing)

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.

This experience is crucial to the development of professional practice skills. The resident will gain proficiency in distribution and clinical skills, personnel management and leadership skills, and insight into process improvement opportunities for acute care facilities.

General

1. Each resident shall obtain a Pharmacist License within the state of Colorado within 120 days of start date.
    - Residents who fail to obtain a Pharmacist License in the state of Colorado within 120 days of start of program must set up an individual meeting with the RPD and Director of Pharmacy. Residents who fail to obtain a Pharmacist License in the state of Colorado within 120 days will be suspended from the residency program until they become licensed. Time missed in the program will be added on to the end of the residency year. Residents may continue to work as pharmacy technicians and continue to receive a student intern salary and benefits until they are licensed. Residents not licensed as a pharmacist in the state of Colorado by January 1 will be dismissed from the program.
2. Residents will receive quarterly staffing evaluations in PharmAcademic.
3. During orientation the residents will receive:
    - Training for procedural issues and systems
    - An orientation checklist (Department, Residency, and Clinical)
4. PGY1 Residents will staff every 3rd weekend and a total of 24 evening shifts over the course of the residency year with 12 being completed by December 31.
    - Residents will submit their requested evening staffing shifts on the annual staffing calendar.
    - Staffing changes/switches will be managed by the residents. Any staffing changes/switches must be communicated to their rotation preceptor in advance of the shift, ideally at the time of the change/switch.
    - Friday evening shifts will be staffed at Memorial Hospital North.
5. The PGY2 Critical Care Resident will staff every 3rd weekend in the ICU and evening shifts in the ED (following completion of their ED rotation) every other week (on average).
    - Residents will be allowed to submit their requests for which day they would like to work the evening shift each week and which day they would like to work the ED weekend if available.
6. The PGY2 Oncology Resident (if available) will staff every 3rd weekend as well as two day shifts per month in the Infusion center.

Holiday Staffing Coverage

Residents, as a part of the professional staff of the department are expected to assist with holiday coverage during the residency year. Every effort will be made to accommodate a resident's preference for the specific holiday assignment. Residents will be expected to cover:

- Two holiday shifts (Labor day, Thanksgiving day, Christmas day, New Year's day, Memorial day, Martin Luther King Jr. day)

Paid Time Off (PTO)

Paid time off accrual and procedures will follow UCHealth Policy. Paid time off would typically be used for illness, personal time off to attend special events, interviews, etc. The UCHealth Family and Medical Leave Policy and UCHealth Personal Leave of Absence Policy outline additional circumstances where leave may be warranted.

PTO is used for interviews for positions after residency or PGY2 positions. Sufficient PTO balance must be available for interview days. Therefore, PTO days should be used judiciously at the beginning of the residency year if the resident plans to pursue multiple opportunities. In the event that PTO is not sufficient, the Director of Pharmacy and Resident, along with the Human Resources/Payroll department, will develop a plan.

If a resident needs to take a sick day and the resident is staffing, the resident must notify the pharmacy administrator on call. The notification can be no later two (2) hours before the start of the shift, unless proper excuse is presented for inability to call. In addition, the RPD must be contacted.

The resident is responsible for arranging switches for all vacation time off during their regular scheduled staffing weekend. Unlicensed residents are not eligible for schedule switches.

If the resident is on a rotation, the preceptor for that rotation must approve the PTO prior to the PTO request being made to the RPD. Requests for PTO must be communicated to the RPD and Director of Pharmacy. It is the responsibility of the resident and the RPD (or their designee) to keep track of resident PTO days.

If a resident attends a pharmacy (or specialty) related professional meeting and the resident stays additional days at the meeting site, these days must be counted as PTO. If the resident does not follow the outlined steps in requesting time off from a rotation (see below), the request for PTO may be denied. It is advised that the resident not make flight arrangements until final approval of PTO is received.

To request time off:

1. The resident sends an email request to the rotation preceptor, with a cc to the RPD
2. The preceptor for the rotation sends "reply to all" with approved or not approved
3. The RPD sends "reply to all" and cc to the administration assistant and Director of Pharmacy with final approved or not approved
4. Administration Assistant and/or Director of Pharmacy will enter the PTO into Kronos

The resident is expected to activate the “Out of the Office” rule in Outlook for all time away from the hospital (PTO or meeting).

Additional staffing activities

Working outside of UCHealth Memorial Hospital (“moonlighting”) will be permitted provided that the moonlighting activities are disclosed to the RPD in advance, the resident is maintaining duty hours, and the resident is performing satisfactorily in the program. Extra shifts at Memorial Hospital will be permitted, provided there is communication with the RPD prior to the resident agreeing to work extra shifts. There will need to be communication between the RPD and the scheduler about the proposed extra shift/s to ensure the resident is maintaining duty hours.

Duty Hours Attestation

Residents will complete a monthly Duty Hours attestation within PharmAcademic to ensure continued compliance with Duty Hours.

Policies

Residents are expected to comply with all UCHealth policies. Pertinent policies are listed below for reference. Printed copies are provided for candidates invited onsite for interview. Policies are housed on The Source, rather than reprinted within the manual, to ensure the most up to date version is being accessed at all times.

A. **UCHealth Corrective Actions and Appeal Process**
B. **UCHealth Travel and Business Related Expenses**
C. **UCHealth Employee Continuing Education Program**
D. **UCHealth Paid Time Off**
E. **UCHealth Family and Medical Leave**
F. **UCHealth Personal Leave of Absence**
G. **UCHealth Workplace Violence Prevention and Intervention**
H. **UCHealth Code of Conduct**
I. **UCHealth Memorial Parking Policy**

Extended Leave From the Residency Program

The resident will be granted leave in accordance with FMLA and leave of absences policies. When extenuating circumstances occur, the RPD and the DOP may consider requests for leave without pay. Specific plans will be considered on a case-by-case basis. The resident will be required to "make-up" time missed in accordance with Residency Program requirements. The maximum leave that can be taken without extending the end date of the residency program (including all leave – professional, conferences, interview days, PTO, vacation leave, sick leave, extended leave, paid leave, unpaid leave, etc) is 37 allowed days per ASHP.

Failure to Progress Policy

- When a resident fails to do any of the following, the preceptor and RPD will review the UCHealth Corrective Actions and Appeal Process
    - A resident fails to present themselves in a professional manner (plagiarism, unprofessional behavior, etc)
    - A resident does not follow policies and procedures of the institution
    - A resident does not make satisfactory progress on the residency goals and objectives as defined by the RPD
    - A resident does not make satisfactory progress toward completion of residency requirements
    - Other issues as deemed appropriate by pharmacy department leadership
- A discussion will then occur between the preceptor involved, RPD, Director of Pharmacy (or delegate), and Human Resources (if needed).
- A meeting will then take place between the RPD, the Director of Pharmacy (or delegate), and Human Resources (if needed), and others as deemed appropriate.
- Based on the issue identified, corrective actions processes may be initiated, to include a written performance improvement plan (PIP) if appropriate. The PIP may include a follow-up plan regarding the behavior, specific goals the resident has to achieve and how it will be monitored, an appropriate timeline to which the resident must comply and an outline of next steps if improvement is not seen.

- The appropriate details of the PIP that impact progression through the residency will be shared with the RAC and future preceptors. Preceptors may be asked to provide written documentation on progress to the resident's advisor and RPD.
- If the follow-up plan is not successfully implemented or another issue arises the RPD and Director of Pharmacy (or delegate) will meet to determine next steps, which may include remediation training, assignments, additional preceptor review, additional rotation experience, suspension, or termination.
- The RPD and Director of Pharmacy (or delegate) will meet with the resident to discuss the additional requirements of the resident in order to continue in the program.
- If the resident fails to comply with the additional requirements or other issues arise the RPD and Director of Pharmacy (or delegate) will meet with Human Resources to determine next steps.
- The resident will have the opportunity to meet with the human resources if desired.

Duty Hours

American Society of Health System Pharmacists (ASHP) Pharmacy Specific Duty Hours

The UCHealth - Memorial Hospital Department of Pharmacy is dedicated to providing residents with an environment conducive to learning. In 2012, ASHP adopted Pharmacy Specific Duty Hours to replace the previous Accreditation Council for Graduate Medical Education (ACGME) duty hours. The RPD, Preceptors, and Residents share responsibility to ensure that residents abide by the ASHP requirements during the residency year.

The Department of Pharmacy supports compliance with the ASHP Duty Hour Requirements to ensure that residents are not compromising patient safety or minimizing the learning experience by working extended periods of time. Key elements of the ASHP requirements include:

- *Duty hours must be limited to 80 hours per week, averaged over a 4 week period, inclusive of on-call activities and all moonlighting (internal and external).*
- *Continuous duty periods of residents must not exceed 16 hours in duration.*
- *The maximum allowable duty assignment must not exceed 24 hours, which includes strategic napping or other strategies to reduce fatigue and sleep deprivation.*
- *Residents must be scheduled for a minimum of one day in seven days free of duty (when averaged over 4 weeks). At-home call cannot be assigned on these free days.*
- *Adequate time for rest and personal activities must be provided. Residents should have 10 hours, and must have at a minimum eight hours, free of duty between scheduled duty periods.*
- *In-house call may not occur more frequently than every third night (when averaged over a 4 week period).*

ASHP defines "duty hours" as: *á all scheduled clinical and academic activities related to the pharmacy residency program. This includes inpatient and outpatient care; in-house call; administrative duties; and scheduled and assigned activities, such as conferences, committee meetings, and health fairs that are required to meet the goals and objectives of the residency program. Duty hours must be addressed by a well-documented, structured process. Duty hours do not include: reading, studying, and academic preparation time for presentations and journal clubs; travel time to and from conferences; and hours that are not scheduled by the NJŠ ă ƛ Ř Ŝ y′Ŏ è LJNJ2 ∃NJ I· Y Ř ƛ NJŜ Ŏ ű 2 NJ 2 NJ I· LJNJŜ Ŏ ŜLJ ű 2 NJΦ ź*

Questions concerning the application of ASHP guidelines should be directed to the RPD and/or the DOP. Additional information concerning the ASHP standards is located at: https://www.ashp.org/-/media/assets/professional-development/residencies/docs/duty-hour-requirements.pdf.

With my signature below I acknowledge that I have read and understand my responsibilities to comply with ASHP duty hour requirements:

_____	_____	_____
Print Name	Signature	Date

Frequently Asked Questions
Adapted from the ASHP and ACGME website

Duty hours must be limited to 80 hours per week
Question: *² K l· ű ƛ ă ƛ ƴ Ŏ f dz Ř Ŝ Ř ƛ ƴ ű K Ŝ Ř Ŝ Ŧ ƛ ƴ ƛ ű ƛ ƨ ƴ ƨ Ŧ Ř d 8 0 è K ƨ dz N K ƨ dz NJ ă LJ Ŝ NJ ø Ŝ Ŝ ļ K ɛ*

Answer: Duty hours are defined as all scheduled clinical and academic activities related to the pharmacy residency program. This includes inpatient and outpatient care, in-house call, administrative duties, scheduled and assigned activities, such as conferences, committee meetings, and health fairs that are required to meet the goals and objectives of the residency program. For call from home, only the hours spent in the hospital after being called in to provide care count toward the 80-hour weekly limit. Hours spent on activities that are required by the accreditation standards, such as membership on a hospital committee, or that are accepted practice in residency programs, such as residents participating in interviewing residency candidates, must be included in the count of duty hours. It is not acceptable to expect residents to participate in these activities on their own hours, nor should residents be prohibited from taking part in them. Duty hours do not include: reading, studying, and academic preparation time for presentations, journal clubs; or travel time to and from conferences; and hours that are not scheduled by the residency program director or preceptor.

Moonlighting
Question: *How is moonlighting defined?*

Answer: Moonlighting is defined as a voluntary, compensated, pharmacy-related work performed outside the organization (external), or within the organization where the resident is in training (internal), or at any of its related participating sites. These are compensated hours beyond the resident's salary and are not part of the scheduled duty periods of the residency program. Moonlighting hours must be counted towards the 80-hour maximum weekly hour limit. Working outside of Memorial Hospital ("moonlighting") will be permitted provided that the moonlighting activities are disclosed to the RPD in advance and the resident is maintaining duty hours. Extra shifts at Memorial Hospital will be permitted, provided there is communication with the RPD prior to the resident agreeing to work extra shifts. There will need to be communication between the RPD and the scheduler about the proposed extra shift/s to ensure the resident is maintaining duty hours.

Minimum Time Off Between Scheduled Duty Periods
Question: *Please explaƴ ű K Ŝ NJ dz f Ŝ NJ Ŝ Ǝ l· NJ Ř ƛ ƴ Ǝ ű ƛ Y Ŝ ƨ Ŧ Ŧ ō Ŝ ű ø Ŝ Ŝ ƴ ă Ŏ K ō Ŝ м л K ƨ dz NJ ă Σ Y dz ă ű ō Ŝ Ŝ ƛ Ǝ K ű K ƨ dz NJ ă ɛ K*

Answer: "Should" is used when a requirement is so important that an appropriate educational justification must be offered for its absence. It is important to remember that when an abbreviated rest period is offered either regularly or under special circumstances, the program director and faculty must monitor residents for signs of sleep deprivation. A typical resident work schedule specifies the number and length of nights on call, but does not always outline the length of each work day. Scheduled or expected duty periods should be separated by 10

hours. There are however, inevitable and unpredictable circumstances in which resident duty periods will be prolonged. In these instances, residents must still have a minimum of eight hours free of duty before the next scheduled duty period begins. This standard applies to all pharmacy residents.

Question: *Under what circumstances would eight hours between shifts be acceptable?*

Answer: Scheduled or expected duty hour periods should be separated by 10 hours. If there are inevitable and unpredictable circumstances that occur in which a resident's duty hours are prolonged, they must still have a minimum of eight hours free from duty before the next scheduled duty period begins.

Averaging of Selected Standards over a 4-Week Period

Question: *How should we handle the averaging of the duty hour standards (80 hour weekly limit, one day off in 7, and call every third night)? For example, what should be done if a resident takes a vacation week?*

Answer: Averaging must occur by rotation. This is done over one of the following: a four-week period; a one-month period; or the period of the rotation if it is shorter than four weeks. When rotations are shorter than four weeks in length, averaging must be made over these shorter assignments. This avoids heavy and light assignments being combined to achieve compliance. The ASHP standard does not address vacation or other leave, however the ACGME requires that vacation or leave days be taken out of the numerator and the denominator for calculating duty hours, call frequency or days off (i.e., if a resident is on vacation for one week, the hours for that rotation should be averaged over the remaining three weeks). The standards do not permit a "rolling" average, because this may mask compliance problems by averaging across high and low duty hour rotations. The rotation with the greatest hours and frequency of call must comply with the common duty hour standards.

Duty Hour Limits and Research and Other Non-Patient Care Activities

Question: *How are the standards applied to rotations that combine research and clinical activities?*

Answer: Some programs have added clinical activities to "pure" research rotations, such as having research residents covering "night float". This combination of research and clinical assignments could result in hours that exceed the weekly limit and could also seriously undermine the goals of the research rotation. Review Committees have traditionally been concerned that required research not be diluted by combining it with significant patient care assignments. This suggests limits on clinical assignments during research rotations, both to ensure safe patient care, resident learning, and resident well-being, and to promote the goals of the research rotation.

Question: *A journal club is held in the evening for 2 hours, outside the hospital. It is not held during the regularly scheduled duty hours, and attendance is strongly encouraged but not mandatory. Do these hours count toward the 80-hour weekly total?*

Answer: If attendance is “strongly encouraged,” the hours should be included because duty hours apply to all required hours in the program, and it is difficult to distinguish between “strongly encouraged” and required. Another way to look at it is that such a journal club, if held weekly, would add two hours to the residents’ weekly time. A program in which two added hours result in a problem with compliance with the duty hour standards likely has a duty hour problem.

Question: *L Ŧ ă ƨ Y Ŝ ƨ Ŧ I· LJNJ ƨ ∃NJ I· Y Ω ă NJ Ŝ ă ƛ Ř Ŝ y ű ă I· ű ű Ŝ y Ř I· Ŏ ƨ y Ŧ S duty hour compliance?*

Answer: If attendance at the conference is required by the program, or the resident is a representative for the program (e.g., he/she is presenting a paper or poster), the hours should be recorded just as they would for an “on-site” conference hosted by the program or its sponsoring institution. This means that the hours during which the resident is actively attending the conference should be recorded as duty hours. Travel time and non-conference hours while away do not meet the definition of “duty hours” in the ASHP or ACGME standards.

Institutional Monitoring and Oversight of Duty Hours

Question: *The ASHP Residency standard states that neither the educational outcomes of the program nor the welfare of the resident or the welfare of patients are compromised by excessive reliance on residents to fulfill service obligations and the guidance document states that duty hours must be addressed by a well documented, structured process. What does this mean?*

Answer: ASHP requires that programs and their sponsoring institutions monitor resident duty hours to ensure they comply with the standards, but does not specify how monitoring and tracking of duty hours should be handled. A number of approaches exist for monitoring resident hours, from resident self-reporting to swipe cards and other electronic measures. All of these have some advantages and some drawbacks, with none clearly being superior in every way and in all settings. ASHP does not mandate a specific monitoring approach, since the ideal approach should be tailored to the program and the sponsoring institution.

Requirements for Successful Completion of UCHealth Memorial Hospital Pharmacy Residency Program

1. Licensed as a pharmacist in the state of Colorado.
2. Residents shall successfully complete a residency project.
    a. A final evaluation by the residency project advisor(s)
    b. Poster Presentation at Vizient University Health System Consortium Pharmacy Network Meeting, if applicable
    c. Poster Presentation at ASHP Midyear Clinical Meeting, if applicable
    d. Platform Presentation at Mountain States Residency Conference or another suitable platform
    e. Presentation to local committees (written and/or verbal)
    f. A written manuscript that meets guidelines for submission to a journal
    g. A cover memo on the manuscript with project advisor's signature indicating approval of the project
    h. A manuscript plus memo submitted to the RPD by June 15
3. Residents shall complete an ACPE-accredited Grand Rounds Presentation.
4. Residents shall obtain 'achieved for residency' on 91% (31 / 34 for PGY1 and 29 / 32 for PGY2) of the program's goals and objectives.
5. All PharmAcademic evaluations are completed and signed by June 30
6. Monthly Duty Hours attestations completed
7. Electronic Residency Portfolio must be submitted to the RPD by June 30.
8. Successful completion of required, elective, and longitudinal rotations
9. Completion and presentation (if available) of a Medication Use Evaluation (MUE)
10. Completion and presentation of (at least) one drug monograph
11. Completion and presentation of (at least) one ADR investigation
12. Completion of all Lead Resident activities as assigned for the respective quarter for PGY1
13. Completion of Teaching Certificate (optional)
14. BLS and ACLS Certification (PALS for PGY2 Critical Care)
15. Attendance and Participation in Code Response for PGY1
16. Additional requirements as specified for PGY2 (Completion of Disease State Appendix)

The responsibility to confirm successful completion of the program requirements rests with the RPD. The above requirements have been developed into a checklist that will be completed quarterly by the resident and the RPD, with the assistance of the Facilitator or Advisors as needed. A copy will be saved in the Electronic Residency Portfolio and PharmAcademic.

Although a pharmacy residency program, as a post-graduation experience, differs from a college of pharmacy or university experience there are similarities. In college, you are not eligible to participate in the graduation exercise if you haven't completed all of the requirements for graduation. This concept also applies to the pharmacy residency program and unless all of the requirements have been completed, you are not eligible to attend the end-of-year function when Certificates of Residency Training are awarded. A Certificate of Residency Training can be awarded when all of the requirements have been completed.

Graduation Tracking

A separate graduation checklist will be maintained for each resident. A copy of the final graduation checklist for will be provided to the resident during orientation, and may reflect changes from the above. The RPD will maintain the graduate tracking list throughout the year. Progress will be reviewed and signed off on the checklist quarterly. The resident will also be sent a tracking of their progress towards the residency goals and objectives as an excel document, at least quarterly.

Code Response

The primary goals of the code response program are to enhance the resident's practice responsibilities and further develop their clinical autonomy. Residents will complete BLS and ACLS certifications during orientation for PGY1 and if not currently active for PGY2 Critical Care, including PALS.

Coverage for PGY1 Residents

PGY1 Residents are expected to attend all in house and emergency department codes/medical emergencies (Adult Code Blue) within the following hours (see caveats below):

- Monday – Wednesday: 7 am – 4 pm
- Thursday – Friday: 8 am – 9 pm
- Saturday – Sunday: 8 am – 9 pm

PGY1 Residents will create a code coverage schedule for the first 6 months of the residency. The schedule should be provided to the RPD by the end of orientation. A schedule for the second 6 months of residency should be provided to the RPD by the end of December. It is suggested that PGY1 residents cover the code pager or participate in code response for a week at a time on a rotating basis, or monthly during their ICU rotation. Only one PGY1 resident and one PGY2 Critical Care resident should respond to a code at a time. During the second 6 months, PGY1 residents still needing code experience or resident preference (ex. Critical Care or Emergency Medicine post-PGY1) may cover the pager at a higher frequency if agreed on by class and RPD.

On days of the teaching certificate program, PGY1 resident code response coverage will end at 2 pm when they depart the hospital for Denver. The PGY1 resident on the Emergency Department or an outpatient/off-site rotation should not cover the pager during their rotation.

It is the PGY1 resident's responsibility to communicate with their preceptor regarding code response coverage. It is the responsibility of the PGY1 resident to arrange for alternate coverage if he/she cannot cover the pager at the designated time.
The code pager should be passed off to the PGY1 resident staffing the Thursday and Friday evening shift at Memorial Hospital Central, unless the PGY1 resident is covering evening hot seat.

On evenings and weekends, the PGY1 resident IS expected to respond to codes when working the EMS shift. If the PGY1 resident is covering evening hot seat, they will NOT cover code response.

During their staffing shift, the PGY1 resident should notify another staff member that they will be leaving order verification to respond to a code. After 15 minutes, the PGY1 resident is expected to check in with another staff member to discuss the anticipated code duration and the current order verification workload. The PGY1 resident should stay for the duration of the code unless order verification volume is substantial.

Failure of a PGY1 resident to attend a code that is paged out during the coverage hours will be reported to the resident's facilitator and RPD by the preceptor who attended the code and any disciplinary action required will be determined by the RPD.

Coverage for PGY2 Critical Care Resident

PGY2 Critical Care Residents are expected to attend to all in house and emergency department medical emergencies (Adult Code Blue) while they are in house (either on rotation or staffing).

It is the PGY2 critical care resident's responsibility to communicate with their preceptor if they will not attend a meeting due to response to a medical emergency.

Evaluation for PGY1 Residents

The PGY1 resident will observe their first two code experiences and review the events at the end with the preceptor who responded to the code. After two observational codes, the PGY1 resident is expected to take an active role in code response. The PGY1 resident will bring the evaluation form with them to every code experience. The evaluation form will be completed by the preceptor at the code and reviewed with the PGY1 resident in a post-code huddle. If evaluation forms are not filled out in a timely manner or the preceptor does not review the code with the PGY1 resident, the PGY1 resident should first attempt to address with the preceptor and then notify the RPD if needed. It is the expectation that the evaluation forms are brought with the resident to the code and given to the preceptor, however if that does not occur the resident must provide the evaluation form to the preceptor within 4 hours of the experience to optimize real-time feedback. After the resident has five documented evaluation forms they no longer need to have the evaluation form completed, however this is at the discretion of the RAC committee based on resident and preceptor feedback. If issues exist, evaluation forms will still be required.

The PGY1 resident will send the completed evaluation to the PGY1 resident's facilitator and RPD. Additionally, evaluations should be saved to the electronic residency binder.

If available, the PGY1 Resident will attend code simulations offered within the hospital or department. A written competency regarding basic code scenarios will be administered to the PGY1 residents and reviewed with a preceptor if deemed necessary due to performance concerns. For continued performance concerns, an action plan will be developed by the RPD in conjunction with department management.

Code progress will be discussed at each quarterly meeting and ACHR determined by the RAC. Once the PGY1 resident is deemed ACHR, a preceptor is not required to remain at the code with the resident.

Evaluation for PGY2 Critical Care Residents

The PGY2 Critical Care resident will observe their first code experience and review the events at the end with the preceptor who responded to the code. After one observational code, the PGY2 resident is expected to take an active role in code response with the goal of independent code response after the first month of the PGY2 residency. An evaluation form will only be required for the first month of the residency. A debrief with the preceptor is always suggested for additional learning opportunities.

If available, the PGY2 Resident will attend code simulations offered within the hospital or department. A written competency regarding basic code scenarios will be administered to the PGY2 resident and reviewed with a preceptor if deemed necessary due to performance concerns. For continued performance concerns, an action plan will be developed by the RPD in conjunction with department management.

Residency Project

The Pharmacy Resident Project is designed to teach the resident about the scientific method, quality improvement, and facilitate their application of knowledge to a project. There is both a didactic and experiential component to the Pharmacy Resident Project. Thus, each resident will learn about research methods and be required to complete one major project relating to a specific aspect of pharmacy. The project may be original research, a problem solving exercise, quality improvement, or the development or enhancement of existing services. The residency program provides an opportunity for preceptors and residents to collaborate on ideas that present a researchable idea. Thus, a structure is in place to facilitate the interaction between residents and preceptors for the yearlong research experience.

Project Idea Generation

Each year, preceptors and department management will be surveyed to generate a list of ideas for potential projects. Ideas may also stem from Memorial or System Pharmacy and Therapeutics (P&T) Committee or other committee needs. Each idea submitted will require the following information:

1. Project Advisor(s)
2. Title of the project: one sentence
3. Brief Description of the proposed project

The approved list of ideas will be given to the new residents by the end of orientation.

Project Idea Selection

The residents will be given a list of ideas from which to select. However, they are also free to propose an idea of their own. Should a resident have a particular interest in an area that is not on the list, approval for the project can be gained through a proposed advisor and the RAC. The resident should talk to the project advisor regarding each idea they are interested in pursuing. These discussions will ultimately lead to the resident selecting a project.

Project Proposal

The resident will be responsible to develop a formal project proposal, which will then be reviewed by the project advisor. The proposal should outline what the goals of the project are, why the goals are important and what methods will be used to complete the project. The project proposal will generally have the following sections:

1. *Project question*: A well-defined question will allow the resident to focus on the correct design and plan. What exactly are you trying to answer?
2. *Objectives*: Be as specific as possible. The objectives should be quantifiable. You can have a primary objective and multiple secondary objectives for each question.
3. *Hypotheses (if applicable)*: What are your hypotheses? What relationships do you expect to see?
4. *Background*: Perform a literature review of the question. Summarize the literature. What has been done? What impact has been shown? This should be sufficient enough to prove why the project is needed and may be used to assemble the final manuscript.
5. *Methods*: How are you going to answer your question? What is your design? What will you measure?
6. *Data analysis*: How are you going to analyze the results?
7. *References*

Project Proposal Approval
Each resident is required to gain approval of the project proposal from their project advisor. In July/August, the resident is required to make a more formal presentation to the RAC. Residents will be required to submit the proposal ahead of time for the committee to review. The potential outcomes of this meeting are either that the project is approved to move forward or the idea requires major modification and a subsequent meeting must be scheduled.

Project Status Updates
The resident will present project status update in person or virtually if on rotation offsite to the Pharmacy Managers quarterly at the Tuesday Managers Meeting. The presentation should last no more than 5 minutes, including questions.

Project Results Presentation and Manuscript
Initial results of the project will be presented in poster format at the ASHP Midyear Clinical Meeting and/or Vizient University Health System Consortium Pharmacy Network Meeting. If the resident's poster is not accepted at one of these meetings or the meeting is cancelled, the RPD will review options including presentation at an alternative meeting or local presentation to fulfill this requirement. Poster review sessions will be scheduled in November. All members of the RAC and department management will be invited.

Final results of the project will be presented as a platform presentation at a regional residency conference, or other suitable forum as deemed appropriate by the RPD. Practice sessions for project presentations will be scheduled at least 3 weeks before the conference. All members of the RAC and department management will be invited.

Additional presentations of the results may be scheduled at various committee or Department meetings as the project advisor sees fit.

A manuscript suitable for publication in a peer-reviewed journal summarizing the findings of the project will be developed. Approval of the final version of the manuscript will be the responsibility of the project advisor. The resident will submit the final, approved version of the manuscript to the RPD by the specified due date. Additionally, an electronic copy will be placed in the resident's electronic binder.

Project Advisor
In most instances, the project advisor will be the person who recommended the topic of study. The preceptor serving as the project advisor will serve as the primary contact for the resident throughout the research process. The project advisor will guide the resident through the proposal writing process and will be responsible for assuring progress is being made and that the research is being done in a scholarly manner. The project advisor will submit quarterly evaluations in PharmAcademic to document the resident's progress.

Resident

The resident will be responsible to invest their time and problem solving skills into the project. The resident will keep their project advisor appraised of progress. The resident will be responsible for carrying on the project in a scholarly manner.

Typical PGY1 Project Timeline (PGY2 Project Timeline to be adjusted based on selected forum for presentation)

Project Idea / Proposal Development	July
Project Approval Meeting	July – August
ASHP MCM or alternative Poster Review Sessions	November
ASHP MCM or alternative Poster Presentation	December
Additional Presentations as Appropriate	December – May
Mountain States Practice Sessions	March – April
Mountain States	May
Residency Project Manuscript Due	June 15

PGY1 Residency Project Checklist

(PGY2 Project Timeline to be adjusted based on selected forum for presentation)

Date completed

July

_____ 1. Select project idea

_____ 2. Select project advisor

_____ 3. Submit project proposal to advisor

_____ 4. Obtain approval from project advisor to proceed with the project

August

_____ 1. Submit a written research proposal to the RAC

_____ 2. Schedule a project approval meeting with the RAC

_____ 3. If outside funding is desired, the grant should be prepared at this time

_____ 4. ASHP MCM Poster submission window opens August 15

September

_____ 1. Final written proposal submitted to project advisor and RPD

_____ 2. Submission to IRB

October

_____ 1. ASHP MCM Poster Submission window closes October 1

_____ 2. Present first draft of poster to the RAC and Department management

November

_____ 1. Present final draft of poster to the RAC and Department management

December

_____ 1. Present poster at ASHP MCM or alternative meeting

_____ 2. Review comments or questions from ASHP MCM poster session or alternative with project advisor and SME

_____ 3. Committee Presentations as determined by project advisor, SME(s), and RPD

March/April

_____ 1. Submit abstract to the Mountain States Residency Conference with approval of your project advisor

_____ 2. Practice Mountain States Platform Presentation to the RAC and department management

May

_____ 1. Present at Mountain States Residency Conference

_____ 2. Review Mountain States Residency Conference with project advisor

June

_____ 1. Written manuscript submitted to the RPD with approval from the project advisor

Grand Rounds

Grand Rounds is a forum in which pharmacy residents formally present clinically relevant topics to pharmacy and hospital staff. The resident will learn to evaluate the scientific literature and discuss its applicability to clinical practice. The goal of Grand Rounds is to enhance the resident's knowledge regarding the use of drug therapy to treat and prevent disease. The resident will learn to present complex concepts and scientific data in a clear and concise manner.

The audience will consist of pharmacy residents, pharmacy practitioners, pharmacy students, and invited guests. Presentations will be formal in nature and audience members will refrain from asking questions during the presentation (except to ask brief points of clarification).

Each resident is required to do one formal presentation. The presentation must comprehensively review the treatment of a medical disorder or examine a pharmacotherapeutic problem in a specific patient population. The topic must be approved by RAC a minimum of three months in advance of the presentation. Each presentation must be 45 – 50 minutes in duration, allowing approximately 10 minutes for questions. The presenter must use audiovisual aids (i.e. slides, video) during the presentation. A practice presentation is required to be given to the advisor and others as deemed appropriate. All members of the audience will evaluate each presentation using a standardized assessment instrument.

Residents must work with content experts/mentors for each presentation. Mentors should provide guidance to the residents regarding the selection of an appropriate topic, developing the handout and slides for the session and writing learning objectives for CE credit. All programs will be offered for continuing education (CE) credit.

Slide Format --- Refer to UCHealth Branding standards

1. The approved UCHealth Power Point template can be downloaded from: https://brand.uchealth.org/site/index
2. Fonts: Arial or Helvetica work best (avoid Times New Roman)
3. Animation:
    a. No backgrounds that contain moving part. Text animation is fine when used in moderation.
4. If you use transition or effect between slides be consistent on every slide
5. An acknowledgement slide is optional.
6. In general, be consistent from beginning to end

Project Timeline

Idea	December
RAC presentation idea approval	Minimum of 3 months in advance of the presentation
First draft due to advisor	2 months prior to presentation
Final draft due to advisor	1 month prior to presentation
Practice presentation	1 month to 2 weeks prior to presentation
Slides due to ACPE coordinator	10 days prior to presentation

Lead Resident Rotation Responsibilities

(only applicable to PGY1 Residents)

The Lead Resident will have defined leadership responsibilities centered on the activities necessary to support the mission and vision of both the residency training program and the Department of Pharmacy. The Lead Resident will rotate quarterly throughout the year.

Lead Resident Responsibilities

1. Working with the Director of Pharmacy and RPD to serve as the point person to facilitate and clarify issues and policies regarding the Pharmacy Residency Program
2. Monthly Resident Meeting
    a. Serve as Chair for this meeting
    b. Prepare an agenda in collaboration with the Director of Pharmacy and RPD
    c. Prepare and distribute meeting minutes following the meeting to all residents
3. Complete projects during the rotation as assigned by the Director of Pharmacy and RPD
4. Attend the RAC meetings. Prepare and distribute minutes of the meeting to the RPD and RAC members.
5. If asked, will be responsible for the "Resident Update" at the Manager's meetings

Specific Monthly Responsibilities

June/July

- Work with administrative assistant to update telephones and computers from last year's residents
    - Current extensions are 59382, 59383, 51138, 51136
    - Set up voicemail by dialing 51374 (default pin 1234)
- Work with administrative assistant to order business cards and white coats
- Acquire biographies for each resident/preceptors to update the webpage
- Facilitate coordination of the code and rotation schedule

November/December

- Assist the RPD in the coordination of activities for the ASHP Midyear Clinical Meeting
- Prepare a summary of hotel and flight information
- Collect the sign in sheets from Residency Showcase

January/February

- Assist the RPD in the coordination of activities for residency interviews
- Prepare a summary of hotel and flight information for candidates

April/May

- Assist the RPD in the coordination of activities for Mountain States Residency Conference
- Communicate with incoming residents on housing, travel plans, preparation for exams, etc.

Residency Applicant Assessment Procedure

ASHP Accreditation Standard 1 states that residency applicant qualifications will be evaluated by the RPD or designee through a documented, formal procedure and that the criteria used to evaluate applicants must be documented and understood by all involved in the evaluation and ranking process. Applicants must be graduates or candidates for graduation of an Accreditation Council for Pharmacy Education (ACPE) accredited degree program (or one in process of pursuing accreditation) or have a Foreign Pharmacy Graduate Equivalency Committee (FPGEC) certificate from the National Association of Boards of Pharmacy (NABP). For PGY2 applicants, the applicant must be participating in, or have completed, an ASHP-accredited PGY1 pharmacy residency program or one in the ASHP accreditation process. UCHealth Memorial Hospital will adhere to all the requirements and deadlines established by the American Society of Health-System pharmacists (ASHP) and the National Matching Services (NMS).

Residency applicants are to submit the following materials through WebAdmit to the RPD by January 2: letter of interest, curriculum vitae, three letters of recommendation, and pharmacy school transcript.

Each application will be reviewed and scored by a minimum of two reviewers, using the Residency Scoring Tool for PGY1 or PGY2, as applicable. The PGY1 and PGY2 Residency Scoring Tools list various categories to be scored and evaluated. The categories may include: (1) Grade Point Average, (2) Work Experience, (3) Extra-curricular activities/Leadership experience, (4) Presentations/Projects/Research, (5) Letter of Intent, (6) Letters of recommendation, and (7) PGY1 Residency Rotations [PGY-2 programs only].

Criteria have been established for each of the categories being evaluated and the associated “point value”. This is provided in the PGY1 and PGY2 Residency Scoring Tools. Under each category, criteria and associated point values are listed. Reviewers are encouraged to use their judgment when scoring applications, as the scores are guidelines only. Reviewers submit point values within WebAdmit.

Applicant scores will be tallied based on the PGY1 and PGY2 Residency Scoring Tools. A preliminary ranking of applicants, along with additional comments from preceptors and residents, will be reviewed by the RPDs and presented to the residency interview team who will make the final decision as to whom to invite for on-site interviews. This process is reviewed yearly with preceptors at the November RAC Meeting and at a meeting with the current residents.

Interview Process

By December, dates for interviews will be determined. Four to six candidates will be offered interviews for each residency position. Interview dates will be selected by the residency candidates in a first-come-first-serve manner. Prior to the interview, candidates will be required to submit a job application through the human resources department. Additionally, candidates will be provided a copy of the residency manual prior to the interview to allow the candidate to fully understand the expectations of the residency programs.

Interviews will be conducted in person or virtually. For in person, the candidates will be brought from the hotel to the hospital by a current resident, taxi or hotel shuttle, or personal transportation. Candidates will notify the

RPD or lead resident if they need transportation. Candidates will be met in the lobby by a residency program member and escorted between interviews by a current resident, preceptor or RPD. Candidates will receive a tour of the department's pharmacy areas and have lunch with the current residents or preceptors. Candidates will interview with the RPD, preceptors, and pharmacy leadership team. The PGY2 candidates will also interview with nursing and physicians from the respective departments. Predetermined questions are provided to the interviewers to evaluate each candidate. The candidate will be evaluated on communication skills, critical thinking skills, and basic pharmacotherapy knowledge through a presentation or written patient case. Virtual interviews with be conducted in the same format as in person utilizing a virtual meeting platform.

Residency Applicant Ranking Procedure

Following the on-site interview, the interview team will submit their scores into WebAdmit. The residency interview team will rank the candidates based on their application, interview, clinical presentation/case, overall impression, and program fit/compatibility. In the event that the residency interview team does not agree, the RPD will retain the final decision.

The RPD will submit the rank list to the National Matching Service. Once the Match results are released, the RPD will distribute the results to the residency interview team and RAC.

Match Phase II Procedure

In the event that all positions are not matched in Phase I of the Match, UCHealth Memorial Hospital will participate in Phase II of the Match in accordance with ASHP regulations. Applicants will be reviewed by a minimum of one preceptor or resident but should be reviewed by two individuals. Assessment will follow the procedure as previously outlined. Six candidates for every position will be offered a telephone/video interview for each open position. Candidates will be provided a copy of the residency manual prior to their interview to fully understand the expectations of the residency program. Candidates will interview with the RPD, preceptors, current residents, and pharmacy leadership based on availability. Predetermined questions are provided to the interviewers to evaluate each candidate.

Following the interview, ranking will commence following the procedure as previously outlined.

Post-Match Procedure

The RPD will contact the candidate(s) that have matched to the program to outline the next steps including sending an offer letter within 30 days of the ASHP Match or as otherwise specified. The RPD will also coordinate orientation information to send to the candidate(s) prior to their start date. The PGY2 RPD will verify the PGY2 resident has completed their PGY1 residency by the end of orientation which includes a copy of their PGY1 certificate and/or contacting the PGY1 RPD to confirm successful completion. If a resident fails to complete their PGY1 program, the resident will meet with the RPD, Director of Pharmacy, and/or Human Resources to determine a plan. The RPD or designee will review program policies with matched candidates and acceptance is documented within 14 days from the start of the residency.

Early Commitment

To be considered for a PGY2 position via the Early Commitment process, a formal letter of interest from a current PGY1 resident shall be provided to the PGY2 RPD, copied to the PGY1 RPD and Director of Pharmacy.

- Signed hard copies of the letter are due to the PGY2 RPD no later than **November 4th.**
- The PGY2 RAC will review interested candidates' progress including, but not limited to, monthly rotation performance and all evaluations in PharmAcademic.
- A brief interview and/or presentation may be requested by the PGY2 RAC committee.
- Following review and discussion of interested applicants, the RAC shall provide a recommendation to the Director of Pharmacy and PGY2 RPD.
- With agreement from the RAC, DOP, and PGY2 RPD, the PGY2 RPD will sign the "Early Commitment Letter of Agreement" from the National Matching Service (NMS) website and send the offer to the PGY1 Candidate.
    - Offer will be provided to the PGY1 no later than December 1st
- The signed acceptance of the offer printed out must be returned to the PGY2 RPD, PGY1 RPD and Director of Pharmacy within 48 hours of receipt.
- The PGY2 RPD will pay the associated fee, no later than December 14th.

Resident Applicant Responsibilities

- Preparation and delivery of a formal letter of interest to be considered for a PGY2 resident position
- Adherence to all applicable deadlines listed above
- Participation in ASHP PGY2 residency matching program according to all ASHP established guidelines and regulations
- Return of signed offer letter is a formal written commitment by resident to the PGY2 program and copies given to the PGY1 RPD and Director of Pharmacy

RPD responsibilities

- Participation in the review of the candidate by RAC
- Approval or denial of the early commitment in collaboration with the Director of Pharmacy
- Preparation and delivery of a formal offer letter for the PGY2 resident position
- Adherence to all applicable deadlines listed above
- Participation in ASHP PGY2 residency matching program according to all ASHP established guidelines and regulations

PGY1 Graduate Tracking

2022-2023		
Name	**Project**	**First Position**
William Martinez University of Colorado Skaggs School of Pharmacy	Characterization of hypoglycemia risk in the inpatient setting: a retrospective chart review	TBD
Vanessa Rivera Rosalind Franklin University of Medicine and Science College of Pharmacy	Retrospective Comparison and Cost Analysis of Dinoprostone to Oral and Vaginal Misoprostol for Cervical Ripening on the Labor and Delivery Unit	Clinical Pharmacist HCA Florida Sarasota Doctors Hospital Sarasota, FL
Kailee Severt Loma Linda University School of Pharmacy	Treatment of alcohol withdrawal syndromes: MINDS versus CIWA protocols and the rates of over sedation	PGY2 Critical Care UCHealth Memorial Hospital Colorado Springs, CO
Collyn Scott University of Colorado Skaggs School of Pharmacy	Comparison of the effectiveness, safety, and compliance to inpatient pharmacy warfarin protocols	Clinical Pharmacist UCHealth Memorial Hospital Colorado Springs, CO
2021-2022		
Name	**Project**	**First Position**
Shayna DeMari Albany College of Pharmacy	Evaluation of Tumor Lysis Syndrome Management Upon Hospital Admission	PGY2 Emergency Medicine University of Vermont Medical Center Burlington, Vermont
Kate Fox Idaho State University	Evaluating inpatient management of acute hypercalcemia in a regional health system	Clinical Pharmacist Saint Alphonsus Health System Boise, Idaho
Savannah Gross University of Georgia	Effect of Various Antibiotic Prescribing Patterns in Open Fractures	PGY2 Critical Care UCHealth Memorial Hospital Colorado Springs, CO
Maria Pearson University of Colorado Skaggs School of Pharmacy	Impact of outpatient administration of high-dose influenza vaccine on inpatient discharges in a hybrid care model	Clinical Pharmacist UCHealth Memorial Hospital Colorado Springs, CO
2020-2021		
Name	**Project**	**First Position**
Alexa Jense University of Toledo	Oral anti-hypertensive protocol to wean nicardipine in neurocritical	PGY2 Critical Care UCHealth Memorial Hospital Colorado Springs, CO

	patients post hypertensive intracranial hemorrhage (ICH)	
Laura Meyer University of Tennessee	Assessment of regular insulin use for the management of hyperkalemia within a community hospital system	MS Pharmacy Practice Fellow/Assistant Clinical Professor University of the Pacific Thomas J. Long School of Pharmacy Stockton, CA
Rebecca Rezac Drake University	Evaluation of an emergency department alert to achieve antibiotic administration within one hour of patient presentation for sepsis	PGY2 Oncology UCHealth Memorial Hospital Colorado Springs, CO
Jeffrey Sperry University of Utah	Administering oral sodium bicarbonate prior to inpatient high-dose methotrexate to reduce hospital length of stay	PGY2 Internal Medicine University of Wisconsin Madison, WI

2019 - 2020		
Name	**Project**	**First Position**
Laura (Becker) Brewer University of Colorado Skaggs School of Pharmacy	Clinical considerations and outcomes in successful re-challenge with immunotherapy after an immune related adverse event	PGY2 Oncology UCHealth Memorial Hospital Colorado Springs, CO
Luisa Hoyt University of Kentucky	Comparing clinical outcomes in C. difficle infection between toxin positive and negative patients in a community hosptial system	Clinical Pharmacist Franklin Memorial Hospital (part of MaineHealth) Farmington, ME
Rachel Jenson University of Wisconsin-Madison	Effect of a pharmacist driven MRSA screening protocol on vancomycin and linezolid days of therapy in patients with pneumonia	Clinical Pharmacist UCHealth Memorial Hospital Colorado Springs, CO
Riya Patel University of Tennessee	Pharmacoeconomic anaylsis of the switch from intravenous to subcutaneous trastuzumab in a large health system	PGY2 Oncology UAB Hospital Birmingham, AL

2018 -2019		
Name	**Project**	**First Position**
Bayli Larson University of Colorado Skaggs School of Pharmacy	A comparison of single versus dual agent antibiotic prophylaxis for cesarean delivery	ASHP Executive Fellowship Bethesda, MD

Neil Schenk Samford University	The incidence of heparin-induced thrombocytopenia (HIT) in cardiothoracic surgery patients receiving heparin versus enoxaparin for VTE prophylaxis	PGY2 Critical Care Prisma Health Richland Columbia, SC
Lauren Schluenz Creighton University	Compliance of protocol driven hepatitis B serological screening in patients receiving anti-CD 20 monoclonal antibody therapy	PGY2 Emergency Medicine University of New Mexico Albuquerque, NM
Courtney Holmes Oregon State University	Use of a Pharmacy Managed Empiric Continuous Infusion Vancomycin Protocol in Pediatrics	PGY2 Pediatrics Loma Linda University Loma Linda, CA
2017 - 2018		
Name	**Project**	**First Position**
Allison Schiefer Ferris State University College of Pharmacy	Comparison of the safety of sugammadex to neostigmine/glycopyrrolate	Clinical Pharmacist UCHealth Memorial Hospital Colorado Springs, CO
Lance Nelson Regis University	Use of acetaminophen (APAP) for neonatal patent ductus arteriosus (PDA) ligation	Clinical Pharmacist Children's Hospital Colorado Colorado Springs, CO
Rachel Miller Samford University	Establishment of a uniform and effective preceptor development program for student and resident rotations within the department of pharmacy	Clinical Pharmacist Children's Hospital Colorado Colorado Springs, CO
Ted Lindgren Drake University	Implementation of a pediatric antimicrobial stewardship protocol for selected acute disease states in a single-centered setting	Clinical Pharmacist Children's Hospital Colorado Colorado Springs, CO
2016 - 2017		
Name	**Project**	**First Position**
Anton Nguyen University Of Utah	Development of a practice standard for monitoring adult patients receiving bone-modifying agents at a community cancer center	Clinical Pharmacist HealthSouth Rehabilitation Hospital of Utah Salt Lake City, UT
Catherine McCall Texas Tech University Health Sciences Center	Evaluation of erythropoietin alfa in patients with acute kidney injury	Clinical Pharmacist Texas Health Presbyterian Hospital Flower Mound Flower Mound, TX
Chelsea Goldsmith University of Iowa	Assessment of initial febrile neutropenia management in	PGY2 Pediatrics Resident Children's Hospitals and Clinics of Minnesota

	hospitalized cancer patients at a community cancer center	Minneapolis, MN
Heather Johnson Medical University Of South Carolina	A comparison of ampicillin-sulbactam to ampicillin plus once daily gentamicin for pregnant women with a diagnosis of chorioamnionitis	Pediatric Clinical Pharmacist Children's Hospital Colorado Colorado Springs, CO
2015 - 2016		
Name	**Project**	**First Position**
Kyle McDaniel University Of Kansas Main Campus	Introduction of a pharmacy driven culture review for outpatient treatment of complicated and uncomplicated urinary tract infections in the emergency department	Emergency Medicine Pharmacist Olathe Medical Center Olathe, KS
Ruby Nkwenti University Of Maryland Eastern Shore	Evaluation of a pharmacy driven central line tube priming protocol to reduce central venous catheter infections in the NICU	Clinical Pharmacist First Health of the Carolinas – Moore Regional Hospital Pinehurst, NC
Diana Fischer University Of Utah	Pharmacy resident implementation of a transitions of care pilot program	PGY-2 Ambulatory Care Resident Intermountain Health Care Salt Lake City, UT
Elizabeth England University Of The Sciences In Philadelphia	Dexmedetomidine adjunct therapy compared to benzodiazepines alone for the treatment of alcohol withdrawal syndrome in critically ill trauma patients	Clinical Pharmacist The Medical Center of Aurora Aurora, CO

PGY2 Critical Care Graduate Tracking

2022-2023				
Name	**PGY-1 Program**	**Project**	**Employment upon completion of PGY2**	**Board Certification**
Savannah Gross	UCHealth Memorial Hospital Colorado Springs, CO			
2021-2022				
Name	**PGY-1 Program**	**Project**	**Employment upon completion of PGY2**	**Board Certification**

Alexa Jense	UCHealth Memorial Hospital Colorado Springs, CO	Impact of prolonged emergency department boarding times on ICU length of stay	ED Clinical Pharmacist MedStar Southern Maryland Hospital Center Clinton, MD	
2020-2021				
Name	**PGY-1 Program**	**Project**	**Employment upon completion of PGY2**	**Board Certification**
Lilliana Gonzales	Texas Health Presbyterian Hospital Dallas Dallas, TX	Assessment of phenobarbital-containing regimens on resolution of alcohol withdrawal syndrome	ICU/ED Clinical Pharmacist UCHealth Memorial Hospital Colorado Springs, CO	
2019-2020				
Name	**PGY-1 Program**	**Project**	**Employment upon completion of PGY2**	**Board Certification**
Joseph Oropeza	Baylor University Medical Center Dallas, TX	Midodrine as Adjunctive Therapy for Vasopressor Weaning in Patients Recovering from Septic Shock	ED Clinical Pharmacist UCHealth Memorial Hospital Colorado Springs, CO	BCCCP

PGY2 Oncology Graduate Tracking

2021-2022				
Name	**PGY-1 Program**	**Project**	**Employment upon completion of PGY2**	**Board Certification**
Rebecca Rezac	UCHealth Memorial Hospital Colorado Springs, CO	Assessment of inpatient hypersensitivity reactions due to chemotherapy at a Community Cancer Center	Blood Disorders and Cellular Therapies Center Ambulatory Care Clinical Pharmacy Specialist University of Colorado Hospital Denver, CO	
2020-2021				
Name	**PGY-1 Program**	**Project**	**Employment upon completion of PGY2**	**Board Certification**
Laura Brewer	UCHealth Memorial Hospital	Evaluating the effectiveness of an immunotherapy call	Surgical Oncology Clinical Pharmacy Specialist	BCOP

	Colorado Springs, CO	ahead program in a community-based oncology infusion center	WVU Medicine Morgantown, WV	
2019-2020				
Name	**PGY-1 Program**	**Project**	**Employment upon completion of PGY2**	**Board Certification**
Abdinasir Bile	University of Minnesota Medical Center Minneapolis, MN	Safety and efficacy of Venetoclax with a hypomethylating agent in the treatment of AML and MDS in community cancer setting	Clinical Oncology Pharmacist M Health Fairview Fairview Ridges Burnsville, MN	