

PGY1 – Longitudinal Resident Project Learning Experience

Preceptors*

*Primary preceptors and preceptors will be assigned dependent project selection

General Description

The ASHP PGY-1 Residency Accreditation Standards require that all residents have project experience during the residency program. This rotation is a longitudinal rotation. The resident will have the opportunity to actively work on a large, major project over the course of the year. This may entail a variety of projects from research studies to implementation of a new pharmacy service. The intent of the project is to provide the resident with the opportunity to develop the knowledge and skills needed to successfully complete and implement such projects in pharmacy practice during their careers. Completing the project involves formulating a question, assessing feasibility and value, creating a study design, conducting a literature search, conducting the actual study, interpreting the study data, and presenting the results. This project may take a year to complete and culminates in the final presentation at a regional residency conference.

All residents will be assigned a primary and secondary preceptor for their project. The preceptors will be determined based upon the project selected.

All resident major projects will be assessed for need for IRB approval, and if either expedited- or full-IRB approval is required, the resident will proceed to obtain the necessary approvals.

Each resident is required to write a report in manuscript style that is suitable for publication at the completion of the project.

A successful outcome to these efforts will be a resident who has conducted a practice related investigation using effective project management skills and presented the results of the project in several venues orally and written.

Resources

There are multiple resources on AsanteNET and on the ASHP Foundation website to help residents write a proposal, complete IRB submission, as well as evaluate and present results.

Time

Time for working on the project will NOT be scheduled in advance by the residency director. It is expected that the resident will find time in their day (or week) to work on the project. This time is likely to be at the end of the workday or on the weekend. If this time is not sufficient, it is expected that the resident negotiates additional time to work on their project by speaking to their preceptor and RPD. One day per month can be approved with prior consent of the current rotation's preceptor and residency director.

Communication and Evaluation of Progress

The project learning experience is a longitudinal rotation with quarterly milestone requirements and evaluations.

In addition to quarterly evaluations, the resident will seek and obtain guidance and feedback from their project preceptors throughout the year on all aspects of the project.

Individual one-on-one feedback will be given on an ongoing basis. Project preceptors will review project ideas, design proposals, project timelines, implementation progress, results, presentations, and manuscript with the resident. Preceptors will discuss deficiencies in action plans or failure to adhere to the project time-line with the resident and report these issues to the RPD. The RPD will work with the resident and preceptors to develop an action plan if project progress or timelines are not being met. The RPD will assess the resident's progress and provide feedback quarterly, and additionally as needed.

Idea Creation

Residents will select a project from the organizations pre-determined project list.

The project may, but is not required to, include a classical research design. Besides classical research, the project may be the development of or improvement to a service or program. Others may be educational outcome focused. Regardless of topic, all projects should strive to include an outcome that is quantifiable and measurable and should include appropriate statistical analysis where applicable. An excellent resource in developing your study design is the ASHP Foundations: Research Tips for Pharmacy Residents (see links on Asante-NET and ASHP Foundation).

The Asante Pharmacy Residency Program is supportive of residents developing their own project ideas. However, we understand that generation of potential project ideas can be difficult early in the residency year and requires multiple levels of leadership approval. As a result, Asante provides a list of potential projects that the resident may select. The list of projects includes a brief description and identifies the project preceptor(s). The resident is encouraged to contact the project management sponsor(s) to get a better understanding of the depth and complexity of the projects on the list.

Date of Selection

The exact date for selection of the project by the resident may vary slightly from year to year. However, the project should be selected by end of July to allow the resident to begin actively working as soon as possible.

Project Proposal Development

The resident will prepare a multi-page project protocol detailing the rationale for performing the project, project design, statistical analysis (if applicable), including sample size calculation (if applicable) project methods, data to be collected, and proposed outcome measures. The resident will present and discuss this protocol with preceptor(s) and key stakeholders. Based on this input the resident will modify the proposal. The project proposal will then be submitted to the RPD who will usher it through the approval process with the Service Line Director and Residency Advisory

Committee. Once approved the resident will submit for IRB approval, as indicated based upon the project type.

Resident Research Proposal Outline – General Format

Research Plan and Supporting Data:

The narrative of the project should be presented in the following format. Provide details in accordance with the following major sections using recent pharmacy and medical literature as references when needed.

Abstract/Summary - The abstract/summary should be limited to approximately 250 words and should summarize the proposed project. This section is typically written last.

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

Purpose - State clearly and concisely the purpose for the research.

Significance - Discuss the scholarly and, or, the scientific merit of this proposal. Depending on the nature of the work, various areas may be addressed. For example, the necessity for the project, contributions to the relevant literature, impact on pharmacy practice, or other relevant purpose may be identified.

Specific Objectives - Provide concise statements of what is to be accomplished in conducting the proposed research.

Methodology - State research hypothesis and discuss methods and procedures for carrying out the project. Provide a specific plan for meeting each stated objective. Discuss the research design, data collection methods, statistical review and analysis. If clinical studies are being proposed, include descriptions of planned medical supervision, patient selection, patient care, and an informed consent document if the research will involve human subjects.

Study Budget - Provide an estimate of the cost of the project including any supplies, drugs, additional personnel, laboratory charges, equipment or any other anticipated research costs.

For IRB applications: see those requirements on AsanteNET.

Timeline Development

Each resident is required to prepare a project timeline. The timeline should be reviewed and approved by the project preceptors and submitted to the RPD. Specific deadlines to be included on the timeline are as follows:

Timeline	Due Date
Select project The resident will utilize the system wide project list to identify a project	July 31
Submit proposal to the RPD for review	August 15 th
Re-submit edited proposal to RPD. This version will be distributed to the Residency Advisory Committee (RAC) and Service Line Director (SLD) for review, comment, and approval	August 21 st
RAC and SLD will return full approval or comments and suggestions within 10 days of receipt	August 30 th
If proposal is approved, the resident will proceed with submission to IRB	Immediately after approval
If proposal requires updates, the resident will make edits and resubmit within 7 days	September 7 th
RAC and SLD will review updated proposal and provide approval or input within 10 days of receipt	September 17 th
Upon approval the resident will submit to IRB (earlier is better)	September or October
Projects may also require P&T approval (based on project type)	PRN
Submit poster application to ASHP	October 1 st
Create poster and have reviewed by preceptor and RPD	November 1 st
Print approved poster at FedEx & submit for expense reimbursement	November 10 th
Present poster at ASHP Midyear	December
Present project to pharmacy staff	April
Present project at SOSHP	April
Present formal platform project presentation to Northwest Regional Pharmacy Residency Conference	May
Write final project manuscript in publishable format and have reviewed by preceptor and RPD Submit for publication	June 15 th

Conduct Study

The resident collects data, implements plans, and coordinates all aspects of the study.

Data Analysis

The resident performs data analysis, statistical comparisons (if applicable), summarization and graphical analysis, where appropriate, and gives a description and interpretation of the results and conclusions. Overall summary of study, results, and proposed conclusions should be approved by project preceptor and co-investigators.

Project Presentations

The resident shall present the project at regional residency conference(s). The project will be presented in poster format at either ASHP Clinical Midyear Meeting (preferably) or in rare cases OSHP Annual Meeting.

Prepare Manuscript

The final stage involves preparing a project manuscript in a publishable format. The manuscript must be reviewed by the project preceptors and RPD and modified as applicable based upon comments and recommendations. The resident is encouraged to submit project results for publication, if appropriate.

A manuscript with complete project information, written in a format acceptable for publication, shall be submitted to and accepted by the project preceptor and RPD in order for the certificate of residency completion to be granted. Final manuscript should be submitted for approval by Residency Program Director 2 weeks prior to the last day of the program.

Manuscript guidelines can be obtained from the journal where submission is desired (e.g., Annals of Pharmacotherapy, Pharmacotherapy, American Journal of Health-System Pharmacy, Federal Practitioner, etc.), or if a specific journal is not identified, American Journal of Health-System Pharmacy author guidelines will be followed.

The final manuscript must be submitted in a **manner suitable for publication** and the resident must meet scientific standards for quality in all aspects of the project, as applicable.

Close out research with Research Office

If IRB approval was required, the resident shall submit a letter to IRB to close out their research project prior to the completion of their residency. If the project will be continued after the resident leaves, the resident must submit a project update letter to IRB so that the preceptors can continue research and remove resident as co-investigator.

Educational Goals/Objectives

Resident achievement of goals is determined through assessment of ability to perform associated objectives. The table below demonstrates the relationship between activities performed on the learning experience and the assigned goals/objectives to the learning experience.

Goals to be TAUGHT and FORMALLY EVALUATED

Competency Area R2: Advancing Practice and improving Patient Care		
Goal R2.2 Demonstrate ability to evaluate and investigate practice, review data, and assimilate scientific evidence to improve patient care and/or the medication use system		
Objective		Activities
R2.2.1	(Analyzing) Identify changes needed to improve patient care and/or the medication-use systems.	<ul style="list-style-type: none"> • Select a topic with the potential to impact pharmacy practice, or potentially result in a positive change to improve pharmacy practice at Asante • Discuss project direction with preceptor(s), management sponsor(s), and RPD to determine feasibility and benefits • Use best practices or evidence-based principles to identify areas for improvement • The resident should seek feedback and tips for success from the RPD and primary preceptor, as well as utilize other sources of guidance (i.e., nursing staff, medical board, other pharmacists)
R2.2.2	(Creating) Develop a plan to improve the patient care and/or medication-use system.	<ul style="list-style-type: none"> • Develop a project proposal including clearly defined steps and target goals • Apply safety design practices (i.e., standardization, simplification, human factors training, lean principles, PDCA, other process improvement or research methodologies) • Applies evidence-based principles, if needed • Considers who or what will be affected by the project • Construct a timeline to support project completion – work with project mentor to plan out timeline and check off completed items • Plan for improvement includes appropriate reviews and approvals (as outlined above), and outside approvals (i.e., IRB, P&T, funding) • Secure initial buy-in from stakeholders • Submit for P&T approval (if required) • If IRB and/or organizational approval are needed, the resident will need to secure those approvals. • The resident will assess and plan for budgetary issues that may impact project implementation. • Uses appropriate electronic data and information from internal and external databases, and appropriate internet resources, and other sources of decision support, as applicable • Plan design is practical to implement and expected to minimize or remedy the identified opportunity for improvement

R2.2.3	(Applying) Implement changes to improve patient care and/or the medication-use system.	<ul style="list-style-type: none"> • Implementation and data collection follows established timeline and milestones • Implements the project as specified in the design • Effectively presents plan to appropriate audience(s) in the department, stakeholders in the health-system, regionally, and nationally • Plan is based on appropriate background information • Gains necessary commitment and approval for implementation • Effectively communicates any changes to appropriate parties • Demonstrates appropriate assertiveness in presenting concerns, solutions, and interests to external stakeholders • Change is implemented fully
R2.2.4	(Evaluating) Assess changes made to improve patient care or the medication-use system.	<ul style="list-style-type: none"> • Outcome of change is evaluated accurately and fully • The resident will utilize critical thinking processes in data analysis to formulate appropriate conclusions. This includes an assessment of operational, clinical, economic, and humanistic outcomes of patient care • Uses Continuous Quality Improvement (CQI) principles to assess success of implementation of change, if applicable • Accurately assesses the impact, including sustainability if applicable, of the project • Appropriately document processes, assumptions, definitions, and limitations • Accurately and appropriately develops plan to address opportunities for additional changes
R2.2.5	(Creating) Effectively develop and present, orally and in writing, a final project report.	<ul style="list-style-type: none"> • The resident will report the outcomes of the project to stakeholders such as P&T, nursing, or administration. Reports include implications for changes to / improvement in pharmacy practice • The resident will orally present the project to the pharmacy department and at a regional residency conference with effective utilization of presentation tools (i.e., handouts, PowerPoint slides) • Presentation topics are well organized and uses appropriate terminology • Secure audience attention at beginning of presentation • Uses appropriate transitions between topics • Displays energy, enthusiasm, and expertise related to the project • Answer questions with good composure.

		<ul style="list-style-type: none"> • Drafts and presents an internally peer reviewed poster submission to ASHP or OSHP according to publication guidelines • Writes and has preceptor and RPD review project final report in manuscript style • Submits manuscript for publication, if applicable
Competency Area R3: Leadership and Management		
Goal R3.1 Demonstrate Leadership Skills		
Objective		Activities
R3.1.1	(Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership.	<ul style="list-style-type: none"> • Demonstrate effective time management • Manages conflict effectively • Demonstrates effective negotiation skills • Demonstrates ability to lead inter-professional teams • Uses effective communication skills and styles • Demonstrates understanding of perspectives of various health care professionals
R3.1.2	(Applying) Apply a process of on-going self-evaluation and personal performance improvement.	<ul style="list-style-type: none"> • Complete a written self-assessment of strengths and opportunities (knowledge, values, skills, and behaviors) quarterly. • Verbally present self-assessment quarterly to PMT and RPD. • Demonstrate the ability to use and incorporate constructive feedback from others • At end of project, write a paragraph of lessons learned
Goal R3.2 Demonstrate Management Skills		
Objective		Activities
R3.2.3	(Applying) Contribute to departmental management.	<ul style="list-style-type: none"> • Helps identify and define significant departmental needs. • Helps develop plans that address departmental needs. • Participates effectively on committees or informal workgroups to complete group projects, tasks, or goals. • Participates effectively in implementing changes, using change management and quality improvement best practices/tools, consistent with team, departmental, and organizational goals.
R3.2.4	(Applying) Manages one's own practice effectively	<ul style="list-style-type: none"> • Manages one's own time in a manner that achieves adherence to the project timeline requirements

Evaluation and Timing of Evaluations

The project learning experience is a longitudinal rotation with quarterly milestone requirements and evaluations. In addition to quarterly evaluations, the resident will seek and obtain guidance and feedback from their project preceptors throughout the year on all aspects of the project. Individual one-on-one feedback will be given on an ongoing basis. Project preceptors will review project ideas, design proposals, project timelines, implementation progress, results, presentations, and manuscript with the resident. Preceptors will discuss deficiencies in action plans or failure to adhere to the project time-line with the resident and report these issues to the RPD. The RPD will work with the resident and preceptors to develop an action plan if project progress or timelines are not being met. The RPD will assess the resident's progress and provide feedback quarterly, and additionally as needed. At the end of the rotation a member of the preceptor team will be expected to discuss the evaluation – with a copy of the evaluation in hand – of the learning experience with the resident to help clarify any potential misunderstandings and to ensure that residents get the most out of the feedback provided. The face-to-face discussion will be documented in PharmAcademic by the preceptor and/or the resident. Evaluations will be completed no later than 7 days due date specified below.

What	Who	When – Due Dates unless otherwise specified
Quarterly Summative Self-Assessment	Resident	Sept, Dec, March
Quarterly Summative Evaluation	Preceptor	Sept, Dec, March
End of Learning Experience Summative Self-Assessment	Resident	2 weeks prior to end of residency
End of Learning Experience Summative Evaluation	Preceptor	2 weeks prior to end of residency
Preceptor Evaluation	Resident	2 weeks prior to end of residency
Learning Experience Evaluation	Resident	2 weeks prior to end of residency

Content of the evaluation:

- The preceptor is expected to grade the resident on the following scale: NI (Needs Improvement), SP (Satisfactory Progress) and Ach (Achieved) depending on the performance of the resident.
- A grade of “NI” means that the resident needs a more exposure and additional formal evaluation on the topic, likely in two separate rotations. Any grade of NI *must* be accompanied by actionable feedback (what must the resident to do improve) for every objective graded NI.
- A grade of “SP” means that the resident is doing what they need to be doing, considering the place they are in the program, but the preceptor does not yet feel that they have achieved the goal. Any goal graded with an “SP” should have actionable feedback (what must the resident to do improve) provided to the resident about what they must do to “achieve” that particular goal. This may also be provided at the objective level if the preceptor wishes to. An objective graded “SP” should receive additional formal evaluation, possibly for as little as a single rotation.

- A grade of “Ach” means that the resident is doing what would be expected of a resident at or near the end of his or her program or comparable to a pharmacist with a year of time spent working. “Achieved” does not mean that the resident *cannot* improve, but it means that the resident would not likely benefit much from further additional formal evaluation. Examples of why the resident deserves the “Ach” are necessary for every goal marked “Ach.”