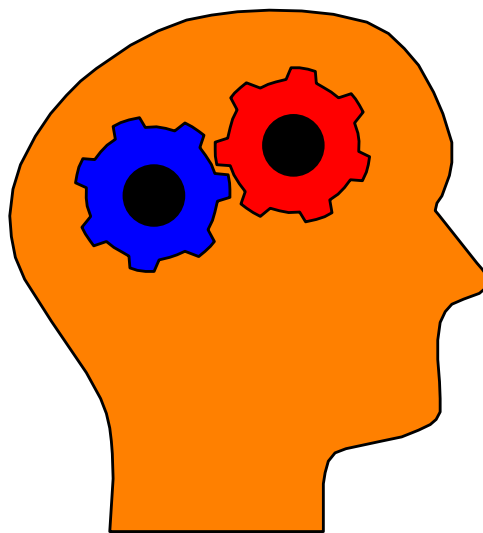


RESIDENT'S GUIDE TO THE RLS THIRD EDITION



American Society of Health-System Pharmacists
7272 Wisconsin Avenue
Bethesda, MD 20814

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Chapter 1: Introduction

Welcome to residency training! It's an exciting and challenging time for you right now as you orient yourself to the daily operations of your health system, the physical plant, and the names and faces of dozens of new people who will play an important role in your year as a resident. "Why," you may be asking yourself, "in the midst of all that I have to adjust to, have I been handed this guide to learning?" Your residency program has chosen to use a systems approach in your residency training. Your program director and preceptors all hope that by doing so your training will be effective (you learn what is most important for you to learn) and efficient (you do it in as little time as possible.) They also perceive that as an entering resident you are evolving into an independent, self-directed learner, and they want to provide you with a learning environment that will help you complete that transition.

The world in which you learn this year is likely to be significantly different from the world of pharmacy school. Your experience there probably went like this: your instructors told you what was important for you to learn, provided you with the materials and experiences necessary to learn those things, and were the judges of whether or not you learned. It was assumed that some students were better than others and that the poorer achievers needed to be "weeded out" before they entered the profession. Thus, you received grades, and those grades were often distributed along a bell curve.

How is residency training using a systems approach different? Well, for one thing, as a group, residents are not assumed to be distributed in their abilities along a bell curve and, therefore, in need of "weeding out." Instead, the notion is that residents represent top graduates of pharmacy schools and are highly motivated to improve their professional skills. Your preceptors receive you into residency training with the assumption that if they provide sound training and an environment conducive to learning, and if you put forth your best effort to learn, your exit this year will be a roaring success. If they detect signs that you are failing to achieve, the first areas they will examine are the goals set for you, their instruction, and the evaluation process. Only when those things are judged sound will they question how you are managing your learning.

Another thing that you will probably find different is the assumption that you are responsible for your own learning. Yes, as you will shortly discover, there are lists of preordained educational goals and objectives your program requires that you master, but you will find there is also a willingness to accommodate your personal interests and abilities and to modify your residency learning plan. Thus, you will take part in fine-

tuning your educational goals as a cooperative endeavor. You will also find that constructing your learning experiences is a cooperative effort. Since you will know exactly what you should be learning each step of the way, you will be expected to make use of that knowledge to focus on what counts most. Since your preceptors will not always be at your right hand, you will increasingly make judgments that a "learning opportunity" exists and seize it. You will be expected to speak up for what you need from the preceptor to master an educational goal. Maybe it will be more modeling of how the preceptor solves a particular type of problem; maybe it will be more coaching with specific feedback as you work through that kind of problem yourself. All this requires that you develop knowledge of how you learn and what teaching behaviors best help you to learn. In other words, when your residency program uses the Residency Learning System (RLS) to design and deliver your training, you must shoulder a major responsibility for your own learning.

Use of the RLS also brings with it a shift in responsibility for evaluating your performance. A major goal of residency training is that you leave the program able to judge the quality of your own work. This is one of the identifying characteristics of the full professional. The need is obvious. Once you leave the world of formal training, you no longer have preceptors to advise you on the quality of your performance. If you are to grow in your skills as a practitioner after you leave the residency, you must assume the role of judge for yourself. Accurate appraisal gives you the self-knowledge you need to make decisions about what more you need to learn. This skill of self-appraisal coupled with your ability to self-direct and focus your own learning gives you what you need to grow toward expertise in the pharmacy profession.

In the systems approach, evaluating your growing skills is a dual process. The preceptor remains the final judge, but you will be asked to contribute by performing self-evaluation on a regular basis. The intent is that, through regular practice and coaching, by the end of the year you and your preceptors will judge your work through a similar lens and draw similar conclusions.

As you can see, your role in learning as a resident will be significantly different from your role as a student. To be a successful learner in the systems approach, you need to be prepared to do your part. That is what this guide is all about. It will set you up with the foundation needed to work with your preceptors effectively. You'll learn about the different components of the RLS, the "language" you need to communicate with your preceptors about your learning, the role you play, and the role of the preceptor. At the start of each chapter you will find educational objectives that specify what you should expect to learn from that chapter.

Our best wishes for a year rich in learning.

Chapter 2: What Is the Residency Learning System (RLS)?

Chapter educational objective: **The resident will discuss the components of the RLS and their relationship to each other.**

Figure 1. The Residency Learning System (RLS)

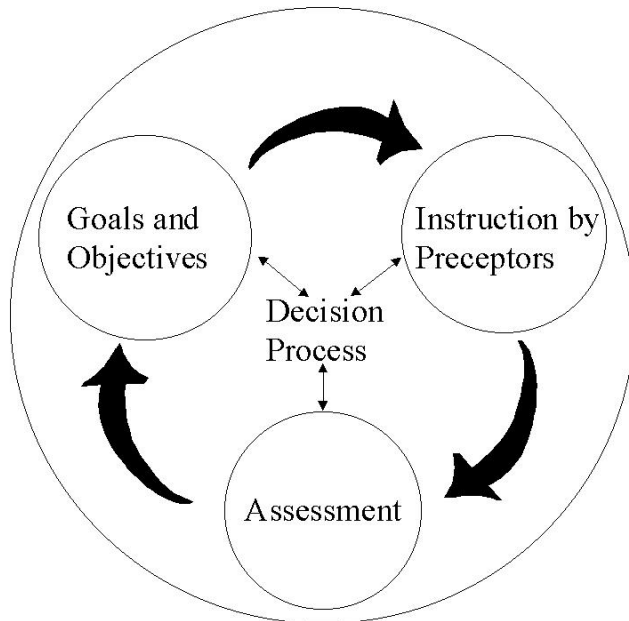


Figure 1 is a diagram of The Residency Learning System (RLS). The RLS is a systematic way of looking at pharmacy residency training. It enables learning to be efficient (take as little time as possible) and effective (consistently achieve the desired results). The Residency Learning System has four subsystems

Component 1: Statements of educational outcomes, goals, and objectives derived from task analysis of the job responsibilities of pharmacists who have completed a residency

Component 2: Instruction by preceptors designed to facilitate resident attainment of the educational outcomes through mastery of the educational goals and objectives

Component 3: Assessment strategies for three areas:

- Preceptor evaluation of resident attainment of the educational goals and objectives of training
- Resident self-evaluation of attainment of the educational goals and objectives of training
- Resident evaluation of the quality of the preceptor and of the learning experience

Component 4: A decision process to guide and balance the selection of different elements in the other three subsystems

The arrows show the interrelations of the subsystems, indicating that a change in one subsystem affects the others. As an illustration of how this works, let us say that we have the following in the residency program educational objectives, “Explain the organization’s medication-use system and its vulnerabilities to adverse drug events (ADEs).” To teach so that the resident can adequately perform this educational objective, the preceptor will need to provide reading materials and/or talk with the resident about central concepts of systems theory, the concept of system error, the meaning of terms associated with ADEs, the meaning of the term “culture of safety”, the role of automation and information technology in both preventing and contributing to medication errors, etc. Evaluation, a term to be used interchangeably with assessment, might be a dialogue between the resident and preceptor about these topics, or the resident could write a page or two summarizing his or her understanding of the organization’s medication-use system and its vulnerabilities.

But what if the goal of the resident’s training is to go beyond understanding the medication-use system and its vulnerabilities to actually doing something about it? Then we must have a different the educational objective. The new objective might read, “Design and implement pilot interventions to change problematic or potentially problematic aspects of the medication-use system with the objective of improving quality.” The instructional setup must also be different. The resident must go beyond acquiring an understanding of the medication-use system and its problems to engage in problem-solving the design and the implementation of an intervention. The preceptor must add modeling of how to do design and implementation and then coaching of the resident as he or she engages in the design and implementation of the intervention. Evaluation must also be different. The preceptor will evaluate the quality of the intervention and its implementation when it was independently designed and implemented by the resident. One of the criteria for determining quality will be whether the design was practical to implement.

The RLS is a tool for empowering preceptors and residents because it exponentially increases the power of the preceptor to teach and the resident to learn. But what if the program chooses to concentrate on using just one or, perhaps, two of the subsystems of the RLS? Let's say the program has the best educational objectives in the business but doesn't use them to drive the instruction. In effect, the program loses the effect of synergy. All four subsystems need to be in place and their interrelationships attended to achieve the maximum effect.

When a program uses the RLS, the training residents receive will be as strong as the weakest component in the system. The quality of preceptor instruction will be reduced by poorly stated educational objectives or lack of effective evaluation. Just like in a stereo system, each component is inextricably linked to, and has a profound effect on, the others.

The Residency Learning System describes a process. It is meant to be a guide for developing and implementing pharmacy residency training. As a resident, you will be working with three parts of the RLS: the educational goal statements and objectives, instruction by your preceptors, and assessment.

Chapter 3: The Role of Educational Goals and Objectives in Your Training

Chapter educational objectives:

- 1. The resident will discuss the differences between educational goals and educational objectives.**
- 2. The resident will accurately interpret the level of learning of a cognitive educational objective using Bloom's Taxonomy.**
- 3. The resident will explain the preceptor's role in using educational goals and objectives to guide a learning experience.**
- 4. The resident will explain his or her role in using the learning experience's educational goals and objectives as a tool to focus learning.**

By now you will have received copies of educational goals and objectives for each of your learning experiences. You will need to refer to them in order to make sense of much of the following discussion.

Educational Goals and Educational Objectives, What's the Difference

Your program will have educational outcomes. These describe broad categories of what will be your capabilities upon graduation from the residency program.

Educational goals are listed under each educational outcome. They are general statements about the knowledge, skills, attitudes, and abilities that you are expected to have by the time you complete your program. Sometimes they may be referred to as outcome competencies. Take a look at the list of educational goals for one of your learning experiences. Note how their wording is broad and sweeping.

Educational goal statements provide the philosophical base upon which your program's educational objectives are subsequently built. Educational objectives are specific. They answer the question, "What could you do that your preceptors could observe and measure, and which, if carried out successfully, would assure them that you had achieved the educational goal?" Sometimes the answer is one type of performance. In other cases

there are two, three, even ten different performances required to be sure the goal is mastered. Educational objectives specify observable, measurable behaviors. Unlike educational goals, they are worded with precision because they are the basis for objective assessment of resident performance. Select one of your goals that have just one objective listed under it. Your preceptors have concluded that if they can observe you successfully performing this one behavior, they can conclude you have mastered the goal. Now select an educational goal that has more than one associated educational objective. In this case, they will judge that you have mastered the goal when you are able to complete all these objectives successfully.

Interpreting the Intent of Your Educational Objectives

Note that each educational objective for your learning experiences starts with a word enclosed in parenthesis. Your residency program preceptors are using the RLS to guide your training. In Chapter 1 of this guide we introduced the idea that the RLS is different from more traditional approaches to learning – it makes you responsible for your own learning. Your preceptors will facilitate, but ultimate responsibility rests with you.

Where do you begin when this responsibility rests on your shoulders? You start by making sure that you clearly understand what it is that you are supposed to learn. It's been written down for you in your educational objectives for each learning experience. That's all very well and good, but it won't be much help if you do not have the skill to read an objective and correctly interpret its intent.

Pick out a couple of your objectives and read them carefully. Notice that in each one there is an unstated assumption that you will be the actor – not your preceptor. Now look at how each objective describes precisely what it is that you will do – sometimes explain, sometimes formulate a strategy, sometimes participate in a team function, and many other things. Most of your educational objectives describe tasks that you will be performing in your first year on the job after residency training. Some are skills you need in order to perform some of the tasks. Some are understandings related to the environment in which you will work. Some are attitudes that characterize the best of this profession. The wording in each objective represents the work of countless residency preceptors over several years to write educational objective statements that are clear as a bell. The first place you go, then, is to read the objective statements.

There is a second piece of helpful information in each educational objective that is not part of the statement itself. Note the word enclosed in parenthesis before each objective, words like knowledge, comprehension and synthesis. These words represent the level of learning expected of you in regard to the objective. Understanding the level of learning will be supremely helpful to you as you guide your own learning.

No doubt you are wondering what is meant by level of learning. Educators have determined that all human learning falls into one of three categories – cognitive,

affective, or psychomotor. Cognitive refers to intellectual skills. Psychomotor learning is what you are doing whenever you learn to move your body in some new way. Affective learning is the acquiring of new values and attitudes. Learning in each area is a hierarchical process, a step-by-step ladder leading from simplicity to complexity. When preceptors plan ways to teach a learner, knowing where the learner currently is on the ladder of learning of a particular concept or skill is invaluable in making the right decisions on what and how to teach next.

The ladders have been codified in educational taxonomies – one for each area of learning. In this guide we will talk about the taxonomy used by the RLS Model to classify the learning you are undertaking this year that falls into the cognitive domain because intellectual learning is the primary focus of your residency. The taxonomy is Bloom's Taxonomy. Figure 2 gives you a comprehensive picture of the taxonomy.

The upward progression on the far left shows that you move from mere knowledge to comprehension until you reach evaluation. The fact that it is a hierarchy implies that for any one intellectual skill you must complete learning at a given level before you will be able to learn at the next. A simple example you will remember from your early math years is that in Algebra I you first had to learn the definition of a simple equation (knowledge) before you could understand the rules for solving one (comprehension) which then enabled you to apply the rules to actually solving a simple equation (application.)

Figure 1 gives examples that are pertinent to what you are learning this year. Look to the right of knowledge. First there is a brief descriptor of what type of learning is going on at the knowledge level. Below it is an objective written to reflect that level of learning. Study each definition and example. Notice that the verbs in each of the examples are things that a person could do if they had learned at that particular level. There is a rule for writing objectives that the verb in the objective must match with the level of learning intended. The RLS educational objective writers have tried to do their job right. Putting the classification of the objective in front in parenthesis is an insurance policy that the intent is clear to you, the learner, and to the preceptor who will teach you.

If you would like to know more about how to interpret or write educational objectives in the cognitive or other two domains, consult the book *Staff Development for Pharmacy Practice* which is cited in Figure 1. It is likely that your residency program director will have a copy if he or she has recently trained in the RLS. If not, it can be ordered from ASHP.

Figure 2: Pharmacy Example Using Bloom's Taxonomy of the Cognitive Domain
 (Source: Nimmo CM. Developing training materials and programs: creating educational objectives and assessing their attainment. In: Nimmo CM, Greene SA, Gurerro R, Taylor JT, eds. Staff development for pharmacy practice. Washington, DC: ASHP; 2000.)

Evaluation	Can judge the value of material based on definite criteria
<ul style="list-style-type: none"> • 	Ex: Determines that a proposed set of pharmacotherapeutic goals for a particular patient are appropriate
Synthesis	Creates something entirely new by putting parts together into a whole
<ul style="list-style-type: none"> • 	Ex: Designs a therapeutic regimen for a patient
Analysis	Breaks down material into parts in order to understand its organizational structure
<ul style="list-style-type: none"> • 	Ex: Selects pertinent information from a patient's medical chart upon which to make decisions for pharmacotherapeutic outcomes for that patient
Application	Uses rules, methods, concepts, principles, laws, or theories in new situations
<ul style="list-style-type: none"> • 	Ex: Calculates a loading dose
Comprehension	Understands the meaning of new material
<ul style="list-style-type: none"> • 	Ex: Explains the differences between progress notes and treatment orders
Knowledge	Recalls learned material
	Ex: Names the parts of a patient medical chart

How Will Your Preceptor Use Your Educational Goals and Objectives in Your Training?

Preceptors will actively use the educational goals and objectives for their learning experiences in these ways.

1. Your preceptor will provide and discuss a list of the educational goals and objectives to be taught/learned at the beginning of the learning experience. If some modifications need to be made because of your current level of skill or interests, this is probably when those adjustments will be made.
2. At the same time, your preceptor will discuss what your learning activities and patient care responsibilities will be and how they relate to achieving

your goals. This will give you a clear picture of how you are to achieve each educational goal.

How Should You Use Your Educational Goals and Objectives in Your Training?

You will be expected to use your educational goals and objectives in three ways as you move through each learning experience.

1. You should work to have a clear understanding of what each goal and its associated objectives mean in terms of what is expected of you.
2. Your focus should be the achievement of the stated educational goals during that time frame.
3. You should use this focus to make daily choices about your activities so as to maximize the possibility of achieving your educational goals.

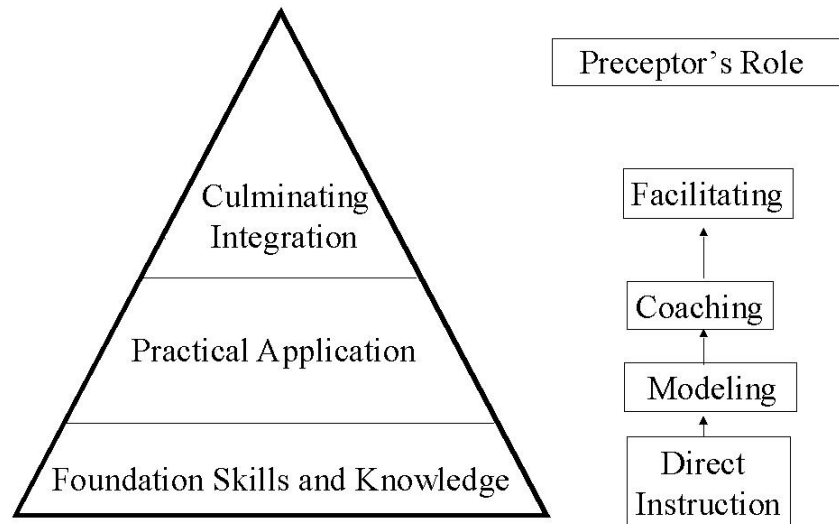
Chapter 4: The Role of Instruction in Your Learning

Chapter educational objective: The resident will describe the four different roles of the preceptor in practice-based teaching and the stage of resident learning at which each should be employed.

The Four Roles of the Preceptor in Teaching Problem-Solving Skills

From your study of Bloom's Taxonomy in Chapter 3 you have already learned about the hierarchical nature of learning. Now we will take this one step further and apply it to the learning situation in which you mostly find yourself during this year – learning to solve practice problems. Figure 3 shows both how your learning will progress on a particular problem solving skill and how the preceptor's role will change as you advance.

Figure 3. The Learning Pyramid. (Source: Nimmo CM. Developing training materials and programs: creating educational objectives and assessing their attainment. In: Nimmo CM, Greene SA, Gurerro R, Taylor JT, eds. Staff development for pharmacy practice. Washington, DC: ASHP; 2000.)



Let's say that you are entering a learning experience in oncology. You will not be much good at providing evidence-based patient-centered medication therapy management with interdisciplinary teams for oncology patients until you have a firm understanding of the various cancers and medications used to treat them. So, your preceptor may begin by having you read chapters in an oncology text or current journal articles on therapies for the kinds of cancers you are about to work with. In this stage of your learning your preceptor is taking on the role of direct instruction.

Your foundational learning accomplished, you are ready for learning to apply the thinking strategies necessary to solve a patient care problem in this area of practice. Knowing about a particular type of cancer and the medications that can be used to treat it does not tell you how to put that information together with the characteristics of this particular patient, what to pull into the consideration, how to weigh it, and how to come up with a solution to a case that doesn't fit the textbook. What you need at this point in your learning is for your preceptor to talk out loud as he or she solves a series of cases so you can "see" how he or she thinks. That role is called modeling. What is being modeled is thinking strategy.

When you have a good idea of how to approach a problem, it's time to try solving one yourself. At this stage of the game you would expect yourself to be uncertain about the fine points and to get stuck once in awhile. The preceptor now switches into the role of coach – you talk out loud about what you are thinking as you work on the patient's case, and the preceptor provides steady feedback about when you're thinking is on the mark and when you are veering off. As you get better, the preceptor will fade back the comments. One day you will find that you are doing

cases together and the preceptor is silent – and not because the preceptor has been rendered speechless by your stupidity!

Now your skills will be in place, your preceptor will be confident of your ability to solve similar cases entirely on your own, and it's time to build your confidence in your ability to work independently. You are at culminating integration, and your preceptor will switch to the role of facilitator. This is the day when you come to work and the preceptor says, "There's a patient with a melanoma in 5C. She's your patient. I'll be in the ambulatory clinic today if you need me." You will find that in those early independent cases your preceptor has picked patients whose problems are ones the preceptor thinks you're ready to solve. As you prove yourself to yourself, the scope of who you care for on your own will widen until you are the independent practitioner in this area that you need to be for that job you are going to walk into next year.

Your Role in Facilitating Your Own Instruction

Much as your preceptors would like to be omniscient about the current state of your learning, they won't always be on the mark in diagnosing where you are and, thus, what instruction you need. Your self-knowledge of your current stage of learning, coupled with your knowledge of the four possible roles of the preceptor, can facilitate effective communication between you and the preceptor and enable the preceptor to adjust his or her role. For instance, let's say you have just entered a learning experience in infectious diseases. Your preceptor is talking out loud about his thought process as he solves a dosing question for a pneumonia patient. You realize that you are having a problem following his decision-making process and realize that it is because you have little knowledge of the pharmacokinetics of the antibiotic in question. You can let the preceptor know you are not following along and can ask for references to build your content knowledge. Later, when you have achieved the appropriate level of knowledge and comprehension, you can ask him to assume the modeling role again and finish going through the case with you.

What Should You Expect From Your Preceptors During Instruction?

There are several things your preceptor will do for you during instruction.

1. Your preceptor will try to focus your learning activities and patient-care responsibilities in such a way that you have the necessary opportunities to master your educational goals. He or she will, of course, be dealing with the randomness of the patient-care environment and won't always be able to produce the "right" patient at the "right" time for your stage of learning. Nevertheless, your learning goals will be as much in the forefront of your preceptor's mind as they are in yours.
2. Your preceptor will be constantly assessing where you are in the hierarchy of learning and adjusting his or her preceptor role to match your learning need. We have already discussed how you can help with that process.

3. Your preceptor will be giving you routine, probably daily, feedback on how you are doing with various skills. That feedback will be tied to specific criteria for successful performance, giving you the information you need to shape your own behavior.
4. Your preceptor will be watching your overall progress and conferring with you and with the program director if additional help is needed.

Chapter 5: The Role of Your Preceptors in Evaluating Your Mastery of Educational Goals

Chapter educational objective: The resident will explain the process by which his or her mastery of the residency training program educational goals will be evaluated.

How Will Your Preceptor's Evaluation of Your Attainment of Educational Goals Be Used?

Your preceptor's evaluation of your progress toward and mastery of educational goals will focus on a number of key areas.

1. When your preceptor keeps you informed about his or her ongoing evaluation of your progress, you can use this information to refine your performance to more closely approximate the educational goal.
2. The preceptor's evaluation can be used to guide modifications in your program plans, as needed.
3. The aggregate of your preceptors' evaluations is used to determine that you have successfully completed the residency program.
4. The aggregate of preceptors' evaluations can be used to identify the need for changes in the residency training program.

For these and other reasons, the RLS places great emphasis on an assessment process that is fair, practical, as objective as possible, and criteria-based so that it is exactly matched to the educational goals and objectives.

How Will You Be Evaluated?

Your preceptors will evaluate your performance and give you feedback on how you are doing in two different time contexts. Summative evaluation occurs at the end of the learning experience. It is a final measure of the degree to which you have accomplished the educational goals of the learning experience. You will also be evaluated on a regular

basis during your learning experience. This is called formative evaluation. We will discuss summative evaluation first.

Use of the RLS requires that your preceptor's evaluation of your performance be directly connected to the learning experience's educational goals and objectives. The systems view dictates that the assessment situation must exactly mirror what the objective states you must do and that the criteria applied to measure success must describe adequate performance of that objective.

Your preceptor will probably assess your attainment of educational goals and objectives by using the RLS form for summative evaluation. Appendix A is an example of this form prepared for a learning experience in direct patient care. If you were the resident in this learning experience, your preceptor would judge your attainment of a specific goal area by writing about the specifics of your performance within that goal area, as demonstrated by your performance on the associated objectives. The preceptor's judgment would be based on his/her observation of your performance over time. Directions for the form for summative evaluation explain that the preceptor must rate your overall performance as:

1. Achieved. You have fully accomplished the educational goal. No further instruction or evaluation is required.
2. Satisfactory Progress. This applies to an educational goal whose achievement requires skill development in more than one learning experience. The learning experience being evaluated is not the last one in which this goal will be taught. In this current experience you have progressed at the required rate to attain full achievement by the end of the program.
3. Needs Improvement. Your level of skill on the educational goal does not meet the preceptor's standards of either "Achieved" or "Satisfactory Progress," whichever applies.

A narrative commentary accompanies the column check. The narrative will cite specifics of your performance that justify the rating. Since achievement of the goal is to be measured by successful performance of the associated objectives, the commentary will speak to the quality of performance skills set forth in the educational objectives as measured by criteria that have been set for each objective.

The following are three examples of how the narrative commentary might be filled out in a summative evaluation. Note that the sample commentaries are each a cumulative look at the resident's performance and not a snapshot of one performance. Instead the narrative is a set of conclusions about the resident's progress and current skill level drawn from the succession of observations occurring during the learning experience. Satisfactory narrative will always relate back to the criteria set for successful performance and describe how closely the resident has come to meeting those criteria. Since evaluations are shared in the RLS approach with the resident's other preceptors, the summative evaluation provides a wealth of information to those who will next teach the resident – helping the new preceptor to pick up where the previous preceptor left off.

First, imagine that you are looking at an evaluation form for a patient care learning experience that lists all of goals of the R2 outcome including goal R2.4.

Goal R2.4: Collect and analyze patient information.

Imagine that a resident is in the last of her direct patient care learning experiences. She has been rated as making "Satisfactory Progress" in three previous learning experiences. In this last experience the preceptor judges that she is fully proficient in building a pharmacist's patient database. The preceptor checks "Achieved" and enters the following narrative alongside the two objectives that fall under the goal:

<p>OBJ R2.4.1 (Analysis) Collect and organize all patient-specific information needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication therapy recommendations as part of the interdisciplinary team.</p>	<ul style="list-style-type: none"> ▪ Consistently records all information needed to make therapeutic decisions. ▪ Worked out method to efficiently record information & it is working well for her.
<p>OBJ R2.4.2 (Analysis) Determine the presence of any of the following medication therapy problems in a patient's current medication therapy: medication used with no medical indication:</p> <ol style="list-style-type: none"> 1. Medication used with no medical indication ////////// 16. Patient not adhering to medication regimen 	<ul style="list-style-type: none"> ▪ Consistently identifies pertinent medication and disease-related problems. ▪ Corrected tendency to base decisions on objective data without referring to patients' expressions of needs and preferences.

Example 2:

Imagine that another resident is completing the third of five direct patient care learning experiences, this one in infectious disease, and is judged to be acquiring documentation skills at an acceptable pace. These are the skills specified in educational goal R2.12.

Goal R2.12: Document direct patient care activities appropriately.

The preceptor checks "Satisfactory Progress" and enters the following narrative after one of the three objectives for Goal R2.12.

<p>OBJ R2.12.1 (Analysis) Appropriately select direct patient-care activities for documentation.</p>	
<p>OBJ R2.12.2 (Application) Use effective</p>	<ul style="list-style-type: none"> ▪ Continues to be thorough & concise in

communication practices when documenting a direct patient-care activity.	documenting SOAP notes. Has added vocabulary for documenting pediatric subjective data. <ul style="list-style-type: none"> ▪ Shows growth in more clearly stating his findings from patient assessments & therapeutic plans. ▪ Needs to concentrate on using appropriate abbreviations & condensing descriptions.
OBJ R2.12.3 (Comprehension) Explain the characteristics of exemplary documentation systems that may be used in the organization's environment.	

Example 3:

Now let's look at a narrative where the resident needs to improve. This last example of a narrative commentary is for a resident in the first direct patient care learning experience. He will have six more direct patient care experiences, but his current preceptor does not judge that his skills in assessing patient progress toward the therapeutic goals during his six weeks in infectious disease has grown sufficiently. The preceptor checks "Needs Improvement" and enters the commentary in the applicable objective of the two that fall under goal R2.10.

Goal R2.10: Evaluate patients' progress and redesign regimens and monitoring plans.

OBJ R2.10.1 (Evaluation) Accurately assess the patient's progress toward the therapeutic goal(s).	<ul style="list-style-type: none"> • Needs to pay more attention to trends in the monitoring data • Needs to pay more attention to factors regarding a particular patient that may make certain of the monitoring data unreliable
OBJ R2.10.2 (Synthesis) Redesign a patient-centered, evidence-based therapeutic plan as necessary based on evaluation of monitoring data and therapeutic outcomes.	

Your preceptor's judgment may be supported by more objective "snapshot evaluations" produced using assessment instruments for the associated educational objectives. The assessment instruments for the objectives are checklists containing criteria for successful performance of the objective. They are meant to be used in conjunction with the

preceptor's direct observation of your performance, or the product of that performance, such as your written monitoring plan for the patient. Appendix B contains a sample of one of these assessment instruments. Your preceptor may decide that for some goal areas, using the form for summative evaluation's checklist and commentary sections are sufficient. For other goals he or she may decide to add one or more assessment instruments that measure the objective(s) for that goal.

Formative Evaluation: A Tool to Help You Shape Your Performance

Your preceptor is formatively evaluating your performance when he or she makes judgments about how you are doing while the learning experience is going on. This kind of evaluation can be formal or informal. Sometimes the preceptor will complete an assessment tool and record his or her judgments, but more often he/she will perform an "in the head" assessment of how you are doing. Such assessments are constantly going on in the mind of good teachers. Ongoing judgments are the basis upon which your preceptors decide what to do next as they cultivate your ability to solve problems.

When your preceptor lets you know what he or she is thinking -- what the evaluative judgment is -- you are getting feedback. As you manage your own learning it's important to remember that receiving information on how you are doing -- what's good and what isn't -- is critical if you are going to improve. Without this information, you will simply repeat the same things over and over again. Although you will also be getting feedback from patients, physicians, and nurses, your preceptor is going to be a key source. You will want to encourage your preceptor to give you lots of feedback and give it frequently. The best feedback focuses on something you have done (process or product) that the preceptor has directly observed, and is based on clear criteria about what constitutes successful performance. If your preceptors are not giving you specific feedback to help you shape your work, ask for it.

Preceptor's Role in Formative and Summative Evaluation

Your preceptors have several functions in evaluating your attainment of educational goals.

1. At the beginning of the learning experience, your preceptor will present his or her strategy for evaluating your attainment of educational goals. You will review the form for summative evaluation prepared for that segment of your training and any assessment instruments for the associated educational objectives the preceptor will be using. You'll also learn when evaluation will occur.
2. Your preceptor will make regular judgments about your progress and skill development and provide that information to you orally and sometimes in writing during the learning experience.

3. Your preceptor will complete and review with you a summative evaluation at the conclusion of the learning experience.

Your Role in Formative and Summative Evaluation

Your role is simple. Take the feedback from your preceptors' formative and summative evaluations and use that information to constantly rethink what you are doing and make it better.

Chapter 6: The Role of Self-Evaluation in Your Training

Chapter educational objectives:

1. **The resident will describe the steps in self-evaluation.**
2. **The resident will describe the RLS process for learning to self-evaluate.**

You will recall from the introduction to this guide that a major goal of residency training is to develop the ability to judge the quality of your own work. Being able to self-monitor and direct one's own learning is one of the marks of a professional and a necessary skill for long-term development of expertise.

How Do I Self-Evaluate?

Self-evaluation is a learned skill you will have begun to master in pharmacy school. You will find rich opportunities to add to that skill during this year. Those of us who work at our professions for a long time inevitably conclude that the ability to self-evaluate is a complex skill that is sharpened over a lifetime if we consciously cultivate it.

To be among those "conscious cultivators," you must follow these self-evaluation steps.

1. Establish criteria of a successful performance.
2. Collect data on your performance.
3. Compare your data with your performance.
4. Make a judgment on how well you did.
5. Make a decision about how to make the next performance better.
6. Try the change you decide upon in your next performance.

As you begin to work at the skill of self-evaluation, the first step is most likely to cause you difficulty. This step requires that you know what constitutes successful performance. Most residents just entering residency training tell us that they can't recite the 12 criteria that constitute an appropriate monitoring plan or the 16 criteria that should be met by a patient's drug therapy problem list.

We can help you get over that barrier by referring you to the RLS lists of criteria for each of the educational objectives in your program. Your program director will give you the criteria for all of your educational goals and objectives at the beginning of the residency year. These lists of criteria should become your best friend. With the criteria lists as references, you can move through the rest of the steps: collect data on your performance (for instance, pull out a monitoring plan you have designed for a particular patient and compare your plan with the criteria), make a judgment (everything okay, except I didn't account for toxicity), decide what to do about it (better make myself a little checklist of areas I need to take care of every time I do a monitoring plan, and refer to it until it becomes automatic), and do it (make the checklist and put it in your pocket notebook.)

Practice will make you better and better at evaluating your own work. The ultimate goal is to get so good that you no longer need the preceptor to tell you what's what. This skill is just like the others you are working to master this residency year. You need feedback on how you are doing in order to shape your performance. You will grow better and faster if you share your self-assessments with your preceptors and ask them to assess the same situations so you can compare your judgments with theirs. By following this process, ultimately you will be able to judge the quality of your practice through the lens of an expert practitioner.

The Preceptor's Role in Self-Evaluation

Your preceptors will function in at least two ways to help you develop self-evaluative skills.

1. Your preceptor will prepare and then discuss with you a program of self-evaluation for the learning experience. The program will probably include the use of criteria-based checklists for the educational objectives. He or she will tell you how and when you should make the evaluations and what you are to do with them.
2. During the learning experience, your preceptor will give you the specified feedback on your self-evaluation progress.

Your Role in Self-Evaluation

You have three responsibilities in self-evaluation.

1. You must accept personal responsibility for learning and improving self-evaluation skills and make a commitment to pursue self-evaluation throughout your career.
2. Over time, you will need to internalize the criteria for successful performance and work at making increasingly accurate judgments.
3. You should request feedback from your preceptors on your self-evaluative attempts whenever it's needed.

Chapter 7: The Role of the Resident in Evaluating the Preceptor and the Learning Experience

Chapter objective: The resident will use knowledge of the criteria associated with preceptor performance to be an effective evaluator.

Why Are You Asked to Evaluate Your Preceptors and Learning Experiences?

If you couldn't answer this question at the onset of this manual, we feel certain you can now and without any prompts. It's the issue of feedback, of course. How can your program be improved or your preceptors get better at being preceptors if they don't get information back from the most important party in the training program? The form you are likely to be asked to complete at the end of each learning experience is Appendix C.

Criteria for Evaluating Preceptor Performance

Please take a moment to read over the list of questions you will be asked to answer about each of your preceptors. These are based on a list of criteria from research literature examining the characteristics most desired by residents in their clinical preceptors. Those characteristics are:

1. Competent provider of patient care
2. Knowledge
3. Feedback
4. Availability
5. Providing opportunities
6. Enthusiasm
7. Explanation and discussions
8. Asking and answering questions
9. Organization
10. Interest in learner

How Will My Evaluation Be Used?

Different programs will use your evaluations of the preceptor and learning experience in different ways. This is a topic to take up with your residency program director during the orientation period.

Appendices

Appendix A: Example Summative Evaluation Form Prepared for a Direct Patient Care Learning Experience

SUMMATIVE EVALUATION

DIRECT PATIENT CARE ROTATION

Resident: _____

Date Completed: _____

Preceptor: _____

Time Period of Learning Experience: _____

- *This form documents resident attainment of educational goals formally taught and scheduled for assessment during this learning experience in the program's assessment strategy. Evaluation of goal achievement is based on preceptor judgment of resident performance on the associated educational objectives listed below each goal. When used for resident-self assessments, the judgments rendered will be the resident's judgment of his or her performance.*
- *The Standard requires that each of the residency program's goals and associated objectives must be evaluated at least once during the residency program.*
- *This form provides for three categories of goals for evaluation. 1) Standard-required educational goals that have been designated to be taught and evaluated during this learning experience. 2) Elective program goals designated to be taught and evaluated during this learning experience. 3) Required or elective goals designated for teaching but not evaluation during this learning experience (those that are monitored).*
- *The preceptor will provide a narrative commentary for each educational goal that is based on current resident performance level and reflects the aggregate resident activity during the learning experience. NI, SP, or ACH entered opposite the goal statement in the rating column for categories 1 and 2 indicates the level of resident achievement at the end of the learning experience.*

Key: NI = Needs Improvement

SP = Satisfactory Progress

ACH = Achieved

Category 1: Goals Required by the Standard and Formally Taught and Evaluated in This Learning Experience

EDUCATIONAL GOALS AND ASSOCIATED OBJECTIVES	NARRATIVE COMMENTARY	RATING
<p>Goal R2.1: As appropriate, establish collaborative professional relationships with members of the health care team.</p> <p>OBJ R2.1.1 (Synthesis) Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with members of interdisciplinary health care teams.</p>		
<p>Goal R2.2: Place practice priority on the delivery of patient-centered care to patients.</p> <p>OBJ R2.2.1 (Organization) Choose and manage daily activities so that they reflect a priority on the delivery of appropriate patient-centered care to each patient.</p>		
<p>Goal R2.4: Collect and analyze patient information.</p> <p>OBJ R2.4.1 (Analysis) Collect and organize all patient-specific information needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication therapy recommendations as part of the interdisciplinary team.</p> <p>OBJ R2.4.2 (Analysis) Determine the presence of any of the following medication therapy problems in a patient's current medication therapy:</p> <ol style="list-style-type: none"> 1. Medication used with no medical indication 		

<ol style="list-style-type: none"> 2. Patient has medical conditions for which there is no medication prescribed 3. Medication prescribed inappropriately for a particular medical condition 4. Immunization regimen is incomplete 5. Current medication therapy regimen contains something inappropriate (dose, dosage form, duration, schedule, route of administration, method of administration) 6. There is therapeutic duplication 7. Medication to which the patient is allergic has been prescribed 8. There are adverse drug or device-related events or potential for such events 9. There are clinically significant drug-drug, drug-disease, drug-nutrient, or drug-laboratory test interactions or potential for such interactions 10. Medical therapy has been interfered with by social, recreational, nonprescription, or nontraditional drug use by the patient or others 11. Patient not receiving full benefit of prescribed medication therapy 12. There are problems arising from the financial impact of medication therapy on the patient 13. Patient lacks understanding of medication therapy 14. Patient not adhering to medication regimen <p>OBJ R2.4.3 (Analysis) Using an organized collection of</p>		
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<p>patient-specific information, summarize patients' health care needs.</p> <p>Goal R2.6: Design evidence-based therapeutic regimens.</p> <p>OBJ R2.6.1 (Synthesis) Specify therapeutic goals for a patient incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and quality-of-life considerations.</p> <p>OBJ R2.6.2 (Synthesis) Design a patient-centered regimen that meets the evidence-based therapeutic goals established for a patient; integrates patient-specific information, disease and drug information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles.</p>		
<p>Goal R2.8: Recommend or communicate regimens and monitoring plans.</p> <p>OBJ R2.8.1 (Application) Recommend or communicate a patient-centered, evidence-based therapeutic regimen and corresponding monitoring plan to other members of the interdisciplinary team and patients in a way that is systematic, logical, accurate, timely, and secures consensus from the team and patient.</p>		
<p>Goal R2.11: Communicate ongoing patient information.</p> <p>OBJ R2.11.1 (Application) When given a patient who is transitioning from one health care setting to another, communicate pertinent pharmacotherapeutic information to the receiving health care professionals.</p> <p>OBJ R2.11.2 (Application) Ensure that accurate and</p>		

<p>timely medication-specific information regarding a specific patient reaches those who need it at the appropriate time.</p>		
<p>Goal R2.12: Document direct patient care activities appropriately.</p> <p>OBJ R2.12.1 (Analysis) Appropriately select direct patient-care activities for documentation.</p> <p>OBJ R2.12.2 (Application) Use effective communication practices when documenting a direct patient-care activity.</p> <p>OBJ R2.12.3 (Comprehension) Explain the characteristics of exemplary documentation systems that may be used in the organization's environment.</p>		
<p>Goal R5.1 Provide effective medication and practice-related education, training, or counseling to patients, caregivers, health care professionals, and the public.</p> <p>OBJ R5.1.1 (Application) Use effective educational techniques in the design of all educational activities.</p> <p>OBJ R5.1.2 (Synthesis) Design an assessment strategy that appropriately measures the specified objectives for education or training and fits the learning situation.</p> <p>OBJ R5.1.3 (Application) Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).</p> <p>OBJ R5.1.4 (Application) Use skill in case-based teaching.</p>		

OBJ R5.1.5 (Application) Use public speaking skills to speak effectively in large and small group situations.		
OBJ R5.1.6 (Application) Use knowledge of audio-visual aids and handouts to enhance the effectiveness of communications.		

Category 2: Elective Program Goals Formally Taught and Formally Evaluated During This Learning Experience

EDUCATIONAL GOALS AND ASSOCIATED OBJECTIVES	NARRATIVE COMMENTARY	RATING
Goal E7.4: Manage time effectively to fulfill practice responsibilities. OBJ E74.1 (Application) Use time management skills effectively to fulfill practice responsibilities.		

Category 3: Goals Formally Taught but Not Scheduled for Formal Evaluation During This Learning Experience

GOALS AND ASSOCIATED OBJECTIVES	NEEDS ATTENTION
None	

COMMENTS: _____

 Preceptor Signature

 Resident Signature

 Program Director Signature

Appendix B: Example Snapshot Containing Criteria for a Required Educational Outcome Objective (R1.4.1)

Objective: (OBJ R1.4.1) *Display initiative in preventing, identifying, and resolving pharmacy-related patient-care problems.*

Assessment Activity: *Cumulative direct observation of practice*

Resident: _____ Preceptor: _____

Adequate performance for this learning experience? Yes _____ No _____ Date form completed: _____

Key: **A = Adequate** **NA = Not Adequate** **NA/NO = Not applicable or not observed**

EVALUATION CRITERIA		A	NA	COMMENTS	NA/NO
1	Actively works to identify the potential for significant medication-related problems				
2	Correctly identifies the problem to be solved				
3	Takes initiative and seeks information to solve the problem				
4	Accurately identifies appropriate sources of information needed to solve the problem				
5	Explores logical alternative approaches to solving the problem				
6	Chooses most appropriate plan for solving the problem				
7	Initiates alternative plan if the problem is not solved				
8	Actively pursues all significant existing and potential medication-related problems until satisfactory resolution is obtained				

Further Comments: _____

Appendix C: Preceptor and Learning Experience Evaluation Form

Resident:	Preceptor:
Learning Experience:	
Evaluation Period:	through

Please check one of the following for each category.

1 - ALWAYS 2 - FREQUENTLY 3 - SOMETIMES 4 - NEVER

Part 1 - Evaluation of the Preceptor		1	2	3	4
1.	The preceptor was a pharmacy practice role model.				
2.	The preceptor gave me feedback on a regular basis.				
3.	The preceptor's feedback helped me improve my performance.				
4.	The preceptor was available when I needed him or her.				
5.	When possible, the preceptor arranged the necessary learning opportunities to meet my objectives.				
6.	The preceptor displayed enthusiasm for teaching.				
7.	The preceptor gave clear explanations.				
8.	The preceptor asked questions that caused me to do my own thinking.				
9.	The preceptor answered my questions clearly.				
10.	The preceptor modeled for me, coached my performance, or facilitated my independent work as appropriate.				
11.	The preceptor displayed interest in me as a resident.				
12.	The preceptor displayed dedication to teaching.				
Comments:					

Please check one of the following for each category.

1 - CONSISTENTLY TRUE 2 - PARTIALLY TRUE 3 - FALSE

Part II: Evaluation of the Learning Experience		1	2	3
1.	I understood the objectives for this learning experience prior to beginning.			
2.	The learning opportunities afforded me during this learning experience matched the objectives specified for this experience.			
3.	Resources I needed were available to me.			
4.	I feel that the preceptor's assessment of my performance on the objectives was fair.			
5.	I was encouraged to further develop my ability to self-assess during this learning experience.			
6.	This learning experience provided me opportunities to provide patient-centered care in a responsible way to my patients.			
What were the strengths of this learning experience?				
What were the weaknesses of this learning experience?				
What suggestions can you make to improve this learning experience?				

Resident's Signature/Date

Preceptor's Signature/Date

Forward completed evaluation to Residency Program Coordinator

