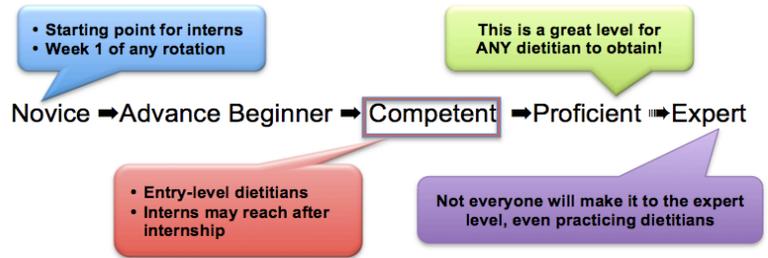


Intern Learning Model for the Core Clinical Rotation

The Core Clinical Practice Experience is the **first clinical experience** our interns complete. It is 10 weeks long (typically including 3-5 weeks with 2-3 different preceptors/services, plus 1 week of staff relief).



A preceptor may acquire an intern during **any** of the learning stages listed below. A quick way to determine where your intern is in their learning process is to consult the table below and ask your intern questions about their experiences and comfort level. The stages of learning are not linear, in that interns, and practicing dietitians, may re-enter certain stages when moving to a new site, service, location, etc.

<u>NOVICE</u>	<u>ADVANCED BEGINNER</u>	<u>COMPETENT</u>
Wave 1: January Wave 2: April	Wave 1: February / March Wave 2: May / June	Variable – Both waves to achieve by internship completion in August
<p>Characteristics:</p> <ul style="list-style-type: none"> Limited (if any) clinical experience. → This is the intern's first clinical exposure Learning the lay of the land (not only how to get from point A to B, but how to tell if TFs are running, who the members of the medical team are, etc.) Textbook learner, difficulty recognizing learned concepts in real clinical examples Carries around notes, refers to notes when answering questions Relies heavily on memorization Has a desire to get things "right" and is therefore not a risk-taker 	<p>Characteristics:</p> <ul style="list-style-type: none"> Gaining some practical experience Applying their textbook learning to observations Characterizes learned examples into groups → Still difficult for intern to differentiate between extraneous experiences and "norms" Will still seek help and guidance, require correction Still unsure in certain situations but gaining confidence and independence 	<p>Characteristics:</p> <ul style="list-style-type: none"> Increased exposure to experiences and norms – able to characterize examples into a hierarchy of importance Higher engagement in independent practice Willing to take risks Realizes it is unrealistic to always "get it right" Further reading/textbook learning makes <i>more</i> sense now that intern possess concrete examples for applying the knowledge NOTE: The intern may or <u>may not</u> master this stage by week 10 → When evaluating your intern offer feedback on how they can move to entry-level RD proficiency in the future

Note: Interns will vary in how quickly they move through these stages. Some interns might cross from Novice to Advanced Beginner in the first couple of weeks of a rotation, or they might take longer to move through these stages. It is important to check in regularly with intern to see where they are at and if they can identify anything to help them move through the learning process. We follow the Academy of Nutrition and Dietetics guidelines which state that students should be ready to perform as entry-level RDs after completing their nine month internship.

Intern Learning Model for the Core Clinical Rotation

Novice

The intern has been learning without any hands on experience. People in this stage have a lot of anxiety about the field so they use concrete rules and “cheat sheets” to make it through the challenges they face. They often fill their lab coats with reference manuals and notes or carry around cheat sheets. The novice intern is still relying on memorization and is preoccupied with getting things “right.” There are many opportunities for a novice learner to gain real examples of how to apply their clinical “book” knowledge. Preceptors can help by explaining their thought processes and actions when working assessing/treating a patient as the student is shadowing them. Especially in the early stages of the internship, patience with the intern, and allowing them to observe others applying clinical knowledge is both valuable and important.

Clinical Example: A few days into her rotation, Jill’s preceptor asks her to check if one of their ICU patients’ tube feeding is running. Jill goes in the room and sees the bottle hanging, but does not check the pump, which has been turned off. She reports back that she thinks the TF is running. Jill hasn’t mastered understanding all the equipment in a patient’s room. She did not think to double check with the nurse as she is still nervous and getting to know the roles and faces on the floor.

Analogy (Learning how to cook): The person requires a specific recipe. They follow the recipe to perfection and make a grocery list of every item to be purchased. If they forget one of the ingredients, they return to the store to get it as they have not yet learned how to improvise and identify foods that might be useful as a substitute.

Advanced Beginner

The intern learns to characterize experiences into examples, as they have now gained some practical knowledge and can apply textbook learning to actual experiences and examples. It is still difficult to categorize which of their experiences are extraneous and which are important so learning is still progressing slowly. They require guidance, constructive criticism/correction and still need to seek help in identifying important learning opportunities.

Clinical Example: Lindsey is currently one month into her rotation. Some of her classmates remain in the novice phase, an appropriate level to be at for this point in their training. Lindsey has exhibited impressive strides and grasped how to calculate tube feeds for more complicated patients on the otolaryngology floor and can efficiently chart on multiple patients a day. However, Lindsey did require more guidance when she started following a patient with multiple comorbidities and a complicated medical history. When Lindsey moves to the transplant service, she will need to learn how the patients and the service differ, but will be able to apply some knowledge from her previous experiences.

Lindsey's questions for her preceptor are less general and more directed at unique experiences she has not previously encountered.

Analogy: The cook has learned that just because a recipe calls for whole milk does not mean he cannot substitute another form of milk. He realizes that the milk is providing the liquid and that using lower fat milk is a simple way to decrease the calories, without ruining the end result. However, he still does not know all of the situations when substitutions are acceptable. For example, he has learned with the milk that he can decrease calories by choosing a low fat milk so when making custard he decides to use egg whites instead of egg yolks. Unfortunately, he will discover that the end result is completely different in this case.

Competent

The intern has been exposed to many clinical examples and he or she has established a hierarchy of importance for when and how to assess a patient and things to look for given their diagnosis. The intern has a higher engagement in independent practice and he or she is willing to take risks, realizing it is unrealistic to always be "right." Any further reading or research the intern does actually makes *more* sense and contributes more to their knowledge than previous textbook learning as he or she now has actual experiences to "hang" that information on.

An intern should be competent by the end of the internship; however he or she will remain in this stage even when hired as an entry-level dietitian. Depending on the position for which a dietitian is hired it could take 6 months to 1 year for the individual to be fully "competent" as it is defined in this model.

Clinical Example: Tom is nearing the end of his eight-month internship and has started working effectively and efficiently on his own. He has had exposure to clinical practice in previous rotations and while he has not been exposed to every medical service, he feels comfortable taking on both stable floor patients as well as acutely ill and complex patients. He is more confident in his ability to make decisions. He occasionally rounds alone with the medical team when his preceptor is unavailable, and he can use appropriate clinical judgment about when he is qualified to recommend a tube feed to the team. He also recognizes more complex situations during which he tells the team that he will consult his preceptor first.

Tom's classmate Jim is at the same hospital and is also nearing the end of his rotation. He has had similar exposure to Tom, but learns differently than Tom and remains in the Advanced Beginner stage. Both Tom and Jim have improved and met expectations as interns throughout their internship. When seeking job opportunities they are both considered "entry level", however Tom will likely require less orientation and might move to a more complex floor faster than Jim.

Analogy: The cook is trying more complicated dishes and purchasing new cookbooks for different ethnic cuisines. They have picked up on some key examples of what ingredients are necessary in cooking (when it is appropriate to substitute egg whites for egg yolk) but still have more to learn. Now they can come

up with a handful of basic dishes without a recipe because they have learned how certain foods can complement each other. They have started making stir-fries and stews, but they still follow directions for quiche.

Proficient

As people in this stage are talking to patients, they can be intuitive about the whole diagnostic picture and what might be going on nutritionally for the patient. They act quickly and appropriately. They have learned to notice key signs and symptoms and can identify key questions to ask both patients and the medical team. Proficient RDs can take quick actions based on their experience. At this point, decision-making has transitioned from what was learned in school to being based more on experience.

Clinical Example: Karen has been a practicing dietitian for 5 years. She has perfected her craft on her service with head and neck cancer patients, and has built good rapport with the team. She keeps up with current research and practice in her field and has been precepting interns for a couple years. Karen can easily cover other floors when the usual RD is out, but she is not as knowledgeable or up to date on the research for the other patient populations. If she were to switch services permanently or move to another hospital where work is distributed differently, she would briefly return to the advanced beginner/competent stages of learning. Given her years of experience, she would quickly excel back to proficiency much faster than when she first started as a dietitian.

Analogy: The cook is now able to prepare complex dishes without a recipe and modify recipes to make them cheaper, lower calorie, sweeter, more colorful or a different texture. If he wants to learn a completely new dish he will have to look at a recipe but it will not take long to learn the new concept and he can soon incorporate that new recipe into his normal use. Proficient cooks are effective at preparing quality meals. They have learned how to change recipes to accommodate their own needs/goals for cooking and can prepare many dishes without recipes.

Expert

This dietitian has vast experience and knows what to do almost immediately regardless of the service/patient population. His or her knowledge is so broad that he or she no longer “sweats the small stuff” and knows when and where to take risks. Experts are active participants in the field and may offer talks/seminars to educate others in the field and may be asked to help participate in writing textbooks, manuals, curriculums and/or research articles. Not all dietitians will reach this level and may not want to. Many dietitians may instead prefer to be proficient in many different areas of dietetics over the course of their career, happy to provide quality care to their patients and work effectively with their healthcare team.

Clinical Example: Mary has been in dietetics for many years, working on multiple medical services and has gained vast clinical knowledge. She functions as an unofficial mentor to many of her dietitian coworkers when they have a patient with a unique situation. It is not uncommon for Mary to know what is going on with a patient beyond dietetic practice with her well-rounded medical knowledge from years of experience and exposure. Mary is often invited to speak at state and national conferences. She has contributed greatly to current research, submitting articles and contributing chapters on her area of expertise in textbooks. While Mary had not aspired to be an “expert” when she started long ago as an intern, her passion and knowledge for the field grew into a motivator to go beyond proficiency.

Analogy: The cook has worked very hard to become an expert and is able to open his own restaurant or bakery. He can create his own recipes and might even make his own cookbook for novice cooks to learn from. Not all cooks will reach this level.

Information was adapted for use by UW dietetic preceptors from Dreyfus, SE and Dreyfus HL.
A five-stage model of the mental activities involved in directed skill acquisition. February 1980.
Published by Operations Research Center at University of Berkeley.