

ACEND Guidelines for Advanced Practice Residencies (1.01)

Accreditation Council for Education in Nutrition and Dietetics

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and Dietetics

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Preface

As a result of recommendations from the Phase 2 Future Practice and Education Task force, the Commission on Dietetic Registration (CDR) approved funding to the Academy of Nutrition and Dietetics' Foundation to provide support for the establishment of advanced-practice residency programs across the spectrum of dietetics practice. The goal of developing these residencies is to foster advanced practice and to provide a career ladder for Registered Dietitians as outlined by the Career Path Guide developed by the Council on Future Practice. In 2012, the following committee was charged with preparing guidelines outlined in this document:

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Background

The Academy of Nutrition and Dietetics' Council on Future Practice developed standardized terms for three levels of dietetics practice (Appendix 1 – Council on Future Practice *Dietetics Career Development Guide*). As dietitians grow professionally, they layer new knowledge, skills and experiences onto an existing foundation. This growth allows dietitians to move from competent practitioners as they enter the field, to proficient practitioners, and finally to advanced level practitioners.

In July 2008, the final report of the Phase Two Task Force for Future Practice and Education recommended that the Academy's leadership focus on defining, educating and recognizing the advanced level practitioner. The task force also cautioned that not all dietitians should be required to attain advanced practice credentials because employment demand will exist for all levels of practice. According to an unpublished report from the 2011 Commission on Dietetic Registration (CDR) Workforce Demand Study, *Dietetics Supply and Demand: 2010-2020*, "if current supply factors and limitations persist, there will be a shortfall between demand for services and the capacity of the dietetics workforce. By 2020, a projected shortfall of about 18,000 full time workers (or more) may exist" (p 2).

The following guidelines describe an advanced practice dietetic residency program. This program structure is applicable to all dietetic practice areas including nutrition support, foodservice management, clinical nutrition management, oncology, pediatrics, etc.

To design an educational structure for advanced practice residencies, an ACEND board member was selected to lead the project. Other committee members were selected to represent educators and practitioners from a broad range of focus areas. This document is the result of the work completed by this committee.

Goal & Features of an APR Program

To provide a comprehensive, systematic, evidence-based approach to advanced level practice education and training for registered dietitians meeting established prerequisites, advanced practice residency programs will be expected to have both didactic and experiential components. Institutions/organizations intending to apply will need to provide sufficient evidence that they can provide advanced level education, training and mentoring in practice areas. Potential sites for APR programs are ones that are housed within an organization that has resources available to provide both the didactic and supervised practice experience at an advanced level. Advance Practice Residency programs are not limited to academic institutions or to the clinical practice area. Programs may use more than one organization to achieve both didactic and supervised practice.

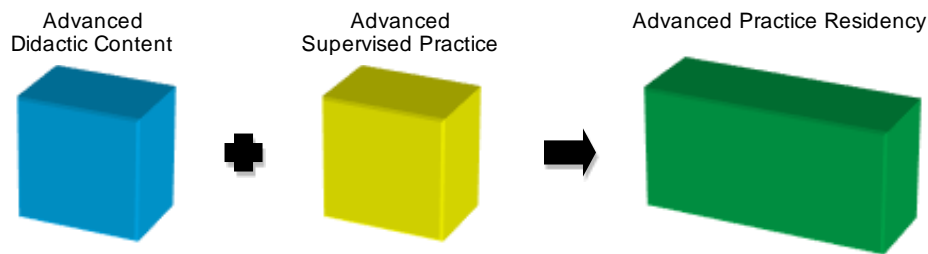


Figure 1. Advanced practice residencies must have both a didactic and supervised practice experience component.

To be consistent with other program types, the following areas need to be described by any program developing an APR based on ACEND guidelines: I. Programmatic Goals and Evaluation, II. Program Curriculum and III. Program Management.

I. Programmatic Goals & Evaluation

- A. Similar to the ACEND standards for education programs training dietitians at the competency level; programs developing an APR based on ACEND guidelines will be required to declare a program goal and expected outcomes for that goal. At the competency level of dietetics, training is broad across many aspects of the field and thus programs at this level need two goals. At the advanced level of training, such as for an APR, training is more focused and therefore only one goal is required. An APR based on ACEND guidelines must demonstrate the following:
1. A minimum of one programmatic goal.
 2. A minimum of one focus area of content.
 3. One outcome requiring the program to define the number of graduates who will contribute to the advancement of the profession through leadership, contribution to the body of knowledge, and mentoring after one year
Example: 70% of graduates will contribute to the advancement of the profession through leadership, contribution to the body of knowledge, and mentoring within 1 year of completing the program.
 4. A minimum of two corresponding, measurable, expected programmatic outcomes defined by the program. The expected outcomes selected should reflect how effectively the program is meeting the program goal. A cut point or "threshold" should be established and stated within the expected outcome indicating achievement of the expected outcome. For example, if the goal is to develop a residency program that will educate and train advanced dietitians in Sports Nutrition, an expected outcome might be written as follows:
Expected Outcome: 80% of the participants in the sports nutrition residency will pass the Board Certification as a Specialist in Sports Dietetics (CSSD) within 1 of year of graduation from the program.
- B. Program prerequisites: To enter an APR, students must meet the following prerequisites a) RDN b) a master's degree and/or pass a comprehensive portfolio review conducted by the program, and c) have a specified number of years in dietetic practice. The number of years of practice should be determined by the program. However, applicants should minimally be deemed "proficient" to start an advanced program residency. The program must determine its own criteria for acceptance into its APR using the following options:
1. Applicants must have a master's degree and complete a portfolio review to be considered for acceptance, or
 2. Applicants must have a master's degree to be considered for acceptance and no portfolio review is done.
- C. Program evaluation: The program must demonstrate systematic, ongoing internal and external evaluation based on programmatic outcomes data.
1. Internal evaluation:
The evaluation of activities done by those involved in program learning experiences, such as the program director, program faculty, program administrators, preceptors, mentors, students and graduates.
 2. External evaluation:
The evaluation of activities done by those not directly involved in program learning experiences, such as employers of graduates, other registered dietitians or dietetic technicians, registered, professionals from other disciplines and communities of interest.
- D. Based on programmatic data analysis, discuss programmatic strengths, opportunities for improvement, and provide detailed strategies for maintaining or improving program effectiveness.

II. Program Curriculum

The program curriculum is based on both competencies and performance indicators (see glossary for definitions). To be consistent with the terminology developed by the Council of Future Practice, terms and criteria used to develop the competencies are from the advanced practice definition. Thus, upon completion of an APR the participant will have achieved or had experience in the activities which define advanced practice. It is the responsibility of the APR program to ensure the didactic information and experiences are at an advanced level.

1. **Competencies and Performance Indicators**

Each APR program must meet all of the following competencies (see table 1) through an *individually* designed curriculum which comprises performance indicators linked to the program focus, goal(s), resources, and timeline. It is important for the APR program to *individualize* the curriculum by:

- A. developing curricular activities that allow the student to gain the skills and knowledge related to demonstrating mastery of the chosen programmatic focus and goal, and
- B. by creating performance indicators under each competency that are achievable within the framework of the program. It is possible that some of the performance indicators may be met 1) using educational methods such as on-line learning activities, or 2) using projects that can be accomplished prior to or after the student attends the APR program. It is recommended that the program establish a method for assuring that the student will accomplish all competencies prior to completion of the program. For example, a declaration of intent to complete all competencies could be developed for the students to sign prior to beginning the program.

Although the program must demonstrate that it is providing distinct learning experiences for each competency the emphasis (i.e. the breadth and depth of the experiences) will vary by the focus area and goal of the individual program. Thus, a program with a focus area in Pediatric Nutrition will have very different performance indicators when compared with the performance indicators of a program with a focus area in Sports Nutrition or Food Systems Management.

The performance indicators are individual learning activities completed by students during the APR. Therefore, the performance indicators are a) the framework of the curriculum for the program, b) unique to the program, and c) designed to provide the student with experiences that will advance the student from a proficient practitioner to an advanced practitioner. Additionally, they should be measurable and linked to advanced practice. It is important to remember that an advanced practitioner must be able to translate knowledge and skills into practice in complex situations. Therefore, the performance indicators should be designed to allow participants to develop this level of practice during the APR. The competencies are the skills and knowledge the student has mastered and is able to perform upon completion of the APR.

2. **Curriculum: Length and Organization**

Program length is dependent upon the amount of time needed for the participant to complete the competencies. Again, not all competencies need to be completed at the physical location of the program. Some may be completed at the facility where participant works or online. The program can individualize the curricular experiences to meet the learning needs of its participants and to meet program goals.

Sample Structure 1:



Sample Structure 2:



Figure 2. Possible curricular organization patterns.

It is the responsibility of the program to determine the best curricular organization to meet its goals and to meet the needs of its participants.

Table 1: Domains and Competencies to be addressed by the program

Domain	Core Professional Behaviors
Competencies	Uses effective communication, collaboration, and advocacy skills.
	Assumes professional responsibilities to provide safe, ethical and effective nutrition services.
Domain	Critical Thinking, Research and Evidence-Informed Practice Integrates evidence-informed practice, research principles, and critical thinking into practice.
Competencies	Applies scientific methods utilizing ethical research practices when reviewing, evaluating and conducting research.
	Incorporates critical thinking skills in practice.
	Applies current research and evidence- informed practice to services.
Domain	Leadership, Business, Management and Organization
Competencies	Demonstrates leadership skills to guide practice.
	Applies principles of organization management
	Leads quality and performance improvement activities to measure evaluate and improve a program services products and initiatives.
Domain	Client/Patient Services
Competencies	Applies a framework to assess, develop, implement and evaluate products, programs and services.
	Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings.

*Domains and competencies were derived from the ACEND Future Education Model.

3. Capstone Project

It is recommended that capstone activities be intertwined or embedded throughout the program. However, whether combined or separate, each student must be engaged in a capstone project as a part of the residency. Per the Council on Future Practice's definition on Advance Practice, an advanced practitioner, "...exhibits a set of characteristics that include leadership and vision and demonstrates effectiveness in planning, evaluating and communicating targeted outcomes." Given this definition, the APR guideline committee determined that advanced level training for dietitians must include activities that promote planning, evaluating and communicating targeted outcomes. For this reason, the capstone project is required by all APR programs.

Capstone guidelines:

- A. To successfully complete an APR program, a student must complete a capstone project.
- B. The capstone project must be at an advanced level.
- C. The capstone project must be either:
 1. A research project, or
 2. A quality improvement project (QIP).
- D. The capstone project must reflect advanced skills, critical thinking and scholarly work as defined by the focus area.
 1. **Suggested considerations** for accomplishing the capstone project:
 - a. Background literature review
 - b. Hypothesis, aims, and methodology development **OR** clinical/operational problem identification
 - c. Skill set needed
 - d. Collaborators needed
 - e. Resource evaluation and plan to acquire needed resources
 - f. Communication of the results including, but not limited to 1) abstract submission with (oral or poster) presentation at a national meeting, or 2) manuscript submission to a peer reviewed journal or professional publication such as practice group newsletters, etc.

4. Curriculum: Components

Each program is required to create and describe a program curriculum and develop performance indicators using the advanced level competencies listed in Table 1:

- A. Three areas that must be described in detail are:
 1. Didactic curriculum
 - a. Performance indicators should be established that reflect how the program will provide focus area knowledge and content.
 - b. A description of the didactic activities required to provide complete performance indicators.
 - c. Didactic hours required for achieving performance indicators
 2. Practice
 - a. Practice-based performance indicators should be established.
 - b. The number of hours spent in supervised practice with an advanced practice preceptor/mentor should be stated and the rationale for this time in terms of meeting the performance indicators.
 3. Program focus area

- a. Specific skill requirements, specific population exposure, involvement or interaction with other disciplines, study development and execution
- b. A description of how the student will acquire knowledge and skills in focus areas.

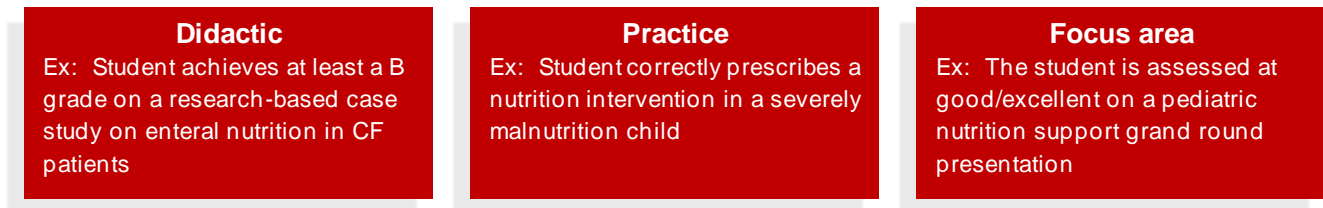


Figure 3. Example of performance indicators from a competency on cystic fibrosis (CF).

5. Curriculum Evaluation

- A. The program must annually evaluate the curriculum to determine whether competencies and performance indicators are being achieved.
- B. The program must have systematic monitoring of curricular outcomes.
- C. The program must establish cut-points or thresholds for all expected competency outcomes based on performance indicators. These thresholds will be used to monitor curricular quality and achievement of competencies.
- D. The program should clearly describe the plan for:
 - 1. data collection of expected curricular outcomes,
 - 2. data analysis
 - 3. data evaluation - to determine whether the expected competency outcomes have been met,
- E. The program must discuss the action plan for improvement of expected competency outcomes not meeting the established thresholds.

III. Program Management

Each program must demonstrate that it has the resources to support its program goal(s):

A. Facilities, equipment, financial support

1. The program must demonstrate that it is financially stable through documentation of income and expenditures.
2. The program must demonstrate it has sufficient resources to support advanced level of learning for the participants.
3. The program must have established policies and procedures for all activities in the program.

B Director and faculty (including preceptors)

1. Program Director

- a. Must meet advanced practitioner criteria (see glossary)
- b. Must be a registered dietitian with a master's degree
- c. Must have sufficient administrative time and resource support to manage the program.

2. Primary preceptors/faculty mentoring students within the APR programs must demonstrate content matter expertise at the advanced practice level within the area they are mentoring.

- a. Primary preceptors supervise, evaluate, and verify achievement of competencies required for a specific practice experience,
- b. Model code of ethical practice

3. Primary Preceptors/Faculty:

- a. Within each program site, there must be a sufficient number of either primary preceptors or faculty with documented qualifications to instruct and supervise all students at that location.
- b. The faculty and primary preceptors must:

- i. Devote sufficient time to the educational program to fulfill their responsibilities, and demonstrate a strong interest in the education of the students, and
- ii. Administer and maintain an educational environment conducive to educating students in the competencies that they are teaching.
- iii. Documented qualifications include:
 - Board or profession-specific registration or certification in focus area. For example, preceptors for a residency in Renal Nutrition should be Registered Dietitians who are also Certified Renal Specialists (CSR).
 - Licensed as required by the state in which the site is located, if applicable. For example, an RD CSR who is precepting in the state of Ohio should also be a Licensed Dietitian (LD) by the State Medical Board of Ohio.
 - Participation at the institution in discussions, rounds, journal clubs, and conferences unique to the focus area on a regular basis. For example, the RD, CSR, LD would regularly participate in grand rounds at the facility.

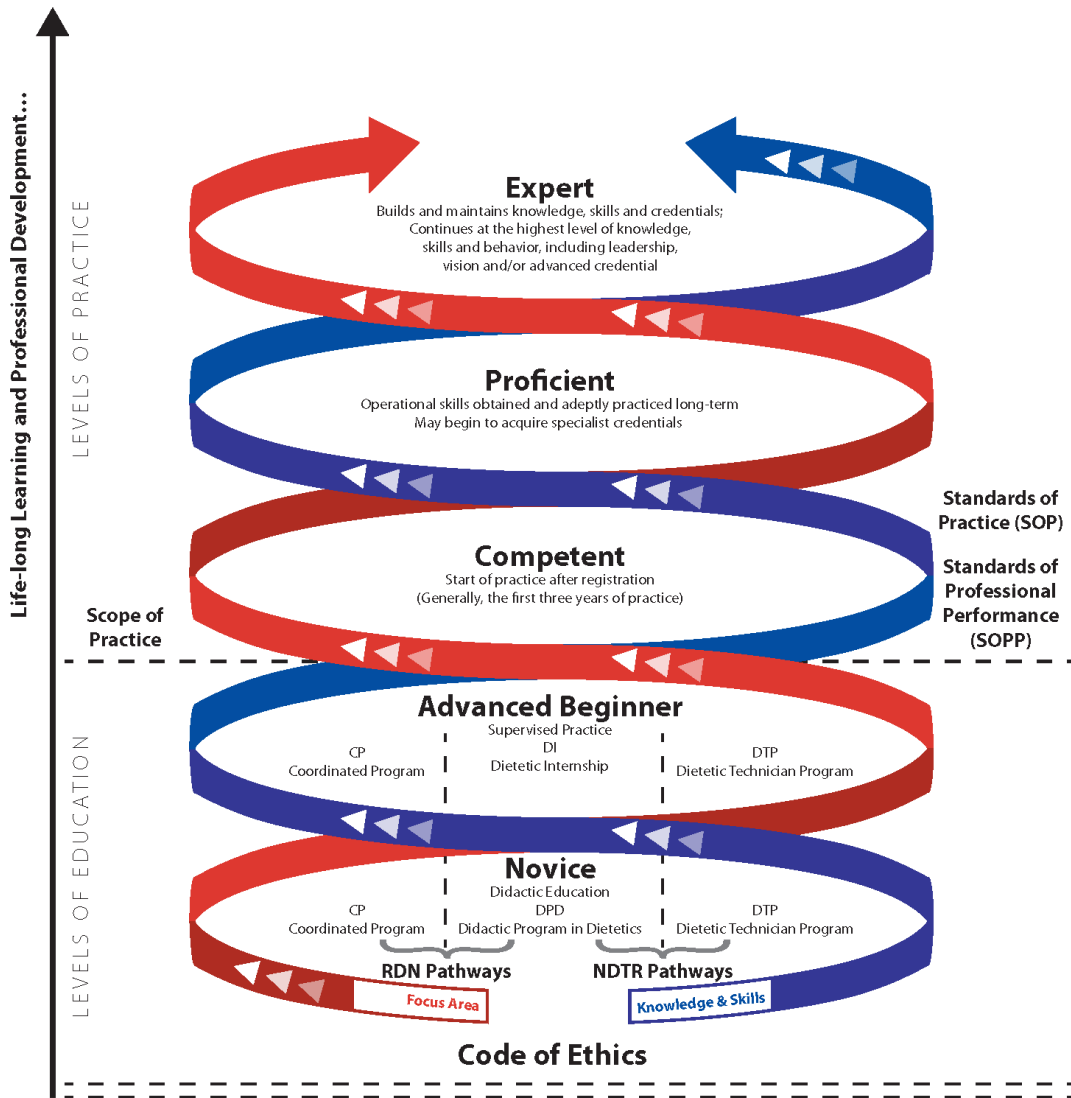
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Appendix

Council on Future Practice: Dietetics Career Path Guide

Nutrition and Dietetics Career Development Guide



Education for Entry into Career Associate, Baccalaureate or Advanced Degree

Definition of Nutrition and Dietetics: Nutrition and Dietetics reflects the integration of Nutrition—which encompasses the science of food, nutrients and other substances contributing to nutrition status and health, with Dietetics—which is the application of food, nutrition and associated sciences, to optimize health and the delivery of care and services for individuals and groups.

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 6/13/2016; 6/20/2016; 8/4/2017

Acronyms and Definitions

Acronyms

ACEND	Accreditation Council for Education in Nutrition and Dietetics
AND	Academy of Nutrition and Dietetics
APR	Advanced Practice Residency
CDR	Commission on Dietetic Registration
CP	Coordinated Program in Dietetics
DI	Dietetic Internship Program
DPD	Didactic Program in Dietetics
DSCA	Dietetics Structured Competency Assessment
DTP	Dietetic Technician Program
FNCE	Food and Nutrition Conference and Exposition
HOD	House of Delegates
NCHCA	National Accreditation Council for Education in Nutrition and Dietetics for Health Certifying Agencies

Definitions

Advanced Practitioner	A registered dietitian who demonstrates a high level of skills, knowledge and behaviors. The individual exhibits a set of characteristics that include leadership and vision and demonstrates effectiveness in planning, evaluating and communicating targeted outcomes (1).
Programmatic Goal	General statements of what the program must achieve in order to accomplish its mission; the ends toward that program efforts are directed (2).
Focus Area	Area of dietetics practice that requires focused knowledge, skills and experience. Some examples are food system management, renal, sports nutrition, pediatrics, neonatal intensive care (3). Further, a person could be at the Proficient or Expert level in his or her focus area of practice but be Competent or even a Beginner in an unfamiliar focus area. Regardless of focus area, a dietitian can attain increasing levels of knowledge and skill throughout a career.
Programmatic Outcome	Established criteria for determining a program's ability to meet its stated goals and the extent to which the program meets that criterion; indicator measures of the result or change. Outcomes are typically related to expectation for graduate success in relationship to program completion, employment or professional advancement (2).
Portfolio Review	As part of the application process a program may require a portfolio submitted by the applicant. This portfolio is a review of written documentation reflecting a potential participant's knowledge, skills and/or abilities obtained prior to entering an Advanced Practice Residency (APR). The purpose of having a portfolio review is to allow the applicant to demonstrate they are currently proficient in dietetics and therefore eligible to begin progressing to an advanced level of practice. The criteria for a portfolio review would be established by the program to meet its individual needs.

Competency	A statement that defines what a participant will be able to do in a particular area, e.g. content knowledge or business skills upon completion of the program(4).
Performance Indicator	A set of expected-learning outcomes that, in the aggregate, describe the actions that learners exhibit when they meet a competency.
Capstone Project	A culminating experience that includes conducting either an advanced quality improvement project or a research project and encompasses the program's concentration area.
Primary Preceptors	Individual in the supervised practice facility who oversees the practical experience and training provided to an APR participant for a particular rotation(s), maintains appropriate contact with the program director and APR participant to coordinate planned learning experiences and assignments and conducts the participant evaluation. This person does not have to be a registered dietitian but does have to be at the advanced level in their focus area (2).
Faculty	Teaching staff for didactic instruction and supervised practice (2)