

Dietetics Educators of Practitioners and American Dietetic Association Standards of Professional Performance for Registered Dietitians (Generalist, Specialty/Advanced) in Education of Dietetics Practitioners

Jean A. Anderson, MS, RD, LD; Karla Kennedy-Hagan, PhD, RD, LDN; Marsha R. Stieber, MSA, RD; Debra S. Hollingsworth, PhD, RD, LDN; Kendra Kattelmann, PhD, RD, LN; Catherine L. Stein Arnold, EdD, MS, RD, LDN; Beth M. Egan, MS, RD, LDN

This report outlines the standards of professional performance (SOPP) for registered dietitians (RDs) who are educators of dietetic practitioners (EODP). The standards were developed by the Dietetics Educators of Practitioners (DEP) dietetic practice group (DPG) of The American Dietetic Association (ADA) under the guidance of the ADA Quality Management Committee and are derived from the Standards of Practice (SOP) in Nutrition Care and the SOPP (1,2) that are part of ADA's Scope of Dietetics Practice Framework (SODPF) (3).

The revised 2008 SOP and SOPP for RDs were published in the September 2008 *Journal of the American Dietetic Association* (1). The rationale and indicators for the 2008 standards were updated using information from

Approved December 2008 by the Quality Management Committee of the American Dietetic Association House of Delegates and the Executive Committee of the Dietetics Educators of Practitioners Dietetic Practice Group of the American Dietetic Association. Scheduled review date: April 2014. Questions regarding the Standards of Professional Performance for Registered Dietitians in Education of Dietetics Practitioners may be addressed to Sharon McCauley, MS, MBA, RD, FADA, American Dietetic Association director of quality management, smccauley@eatright.org, or Cecily Byrne, MS, RD, American Dietetic Association manager of quality management, cbyrne@eatright.org.

ADA Regulatory Affairs' review of regulations, electronic survey feedback, and through the consensus of the members of the 2006-2007 and 2007-2008 ADA Quality Management Committees, whose members represent diverse practice and geographic perspectives (1).

ADA's revised 2008 and 2005 SOP and SOPP guide the practice and performance of RDs in all settings. These standards and indicators reflect the minimum competent level of dietetics practice and professional performance for RDs. ADA's 2005 SOP and SOPP (2) and subsequently the revised 2008 standards (1) serve as blueprints for the development of practice-specific SOP and SOPP for RDs in specialty and advanced levels of practice. ADA has defined the core SOP as the minimum competent level of dietetics practice for practitioners who have direct patient and client contact (1). The DEP DPG does not include the SOP in the scope of its members, but recognizes their importance in other practice areas that participate in direct patient and client care.

The DEP DPG Executive Committee identified a lack of evaluation and benchmarking tools specific to the practice of dietetics educators and preceptors (see Glossary), and initiated the

J. A. Anderson is a senior clinician and dietetic internship director, Department of Food Science and Human Nutrition, Iowa State University, Ames.

K. Kennedy-Hagan is an assistant professor, dietetic internship coordinator, and assistant chair, School of Family and Consumer Sciences, Eastern Illinois University, Charleston. **M. R. Stieber** is student services coordinator, Arizona Department of Health Services Bureau of Chronic Disease Prevention and Control, Mesa. **D. S. Hollingsworth** is a professor, dietetic internship director, and chair, Department of Nutrition and Family Studies, McNeese State University, Lake Charles, LA. **K. Kattelmann** is a professor and director, Didactic Program in Dietetics, South Dakota State University, Brookings. **C. L. S. Arnold** is assistant to the provost and chair, Nutrition Department, Benedictine University, Lisle, IL. **B. Egan** is a clinical coordinator, Dietetic Internship and Residency Program, Health and Sports Sciences Department, University of Memphis, Memphis, TN.

0002-8223/09/10904-0019\$36.00/0
doi: 10.1016/j.jada.2009.01.019

development of the SOPP for RDs who work in the education of dietetics practitioners. The DEP DPG recognizes the importance of educators who are dietetic technicians, registered (DTRs); however, the current SOPP are written only for educators who are RDs. The SOPP are statements that describe a competent level of professionalism and professional role behaviors. These SOPP are the first tools available for RDs who work in the education of dietetics practitioners to evaluate the level of their practice knowledge and skills, identify areas for professional development, and to demonstrate competency in this specialty field. The standards can be used as part of the Commission on Dietetic Registration (CDR) Professional Development Portfolio process (4) as a guide for individual self-evaluation and practice improvement and to focus continuing education efforts toward individualized specific goals for progressive practice. The SOPP are a tool for demonstrating competence as part of a food and nutrition professional's practice domain. The SOPP indicators are expanded upon to reflect the unique competence expectations of RDs who work in the education of dietetics practitioners and/or preceptor for students, dietetics interns; and learners, including, but not limited to, entry-level RDs and DTRs. All indicators may not be applicable to an individual RD's practice in education. Although not all dietetics educators and preceptors are RDs, the SOPP is written for RDs in this field. An individual RD may use the SOPP as a tool to guide self-reflection and professional development. The SOPP for EODP may be considered by college and university faculty as they prepare promotion and tenure documents. In addition to self-evaluation, the standards may also be used in peer evaluation.

The Commission on Accreditation for Dietetics Education (CADE) accredits four types of dietetics education programs: the Didactic Program in Dietetics (DPD), which provides coursework at the undergraduate and graduate level to meet specific knowledge concepts needed to become an RD; Coordinated Programs (CP), which provide coursework at the undergraduate and graduate level to meet specific knowledge concepts along with supervised practice needed to become an RD; Dietetic Internship (DI), which provides supervised practice to meet specific

competencies and skill sets needed to become an RD; and Dietetic Technician Programs (DTPs), which provide coursework at the associate's degree level to meet specific knowledge concepts in conjunction with supervised practice needed to become a DTR (5). Dietetics education of RDs and DTRs includes both didactic and supervised practice components, the general content of which are delineated by CADE and provide for a multifaceted entry-level knowledge base. Thus, EODP include a variety of RDs and other professionals who may be preceptors (ie, the expert or specialist who provides practical experience and training for a student or intern) in a supervised practice experience, lecturers in an undergraduate or graduate education program, or dietetics education program directors located in a medical center or in a university.

Preceptors or program directors who practice in the field of dietetics must complete self-development expectations related to their specific facility (eg, medical center, community health agency, or foodservice establishment) according to their defined job responsibilities, as well as serve on committees and other tasks as assigned. College- or university-based EODP are expected to engage in self-development; that is, scholarly and creative activity that includes research and publications. No matter the specific practice domain of a dietetics educator, each educator should be practicing evidenced-based teaching constructs and methods.

LEVELS OF EDUCATOR EXPERTISE

Because future dietetics practitioners are educated in a wide range of practice settings, it is difficult at this time to differentiate amongst the varying levels of educator expertise. The SOPP for EODP are intended for RDs who are university faculty members and dietetics program directors, as well as other educators, including, but not limited to, community health educators, hospital and medical center preceptors, foodservice managers, and adjunct instructors. CADE requires that education programs have qualified faculty and preceptors, including that the primary preceptor is appropriately credentialed and licensed and has at least 1 year of professional experience after achieving the RD credential (5). Whereas most

EODP have elected to concentrate their professional growth in a certain practice area, some might be considered to be at the generalist level. Similarly, an educator might meet the SOPP specialty level in their practice area but be new to the role of educator and thus performs at the EODP SOPP generalist level. Due to the variety of EODP practice settings and professionals, only two levels of practice (generalist and specialty/advanced) are defined in the SOPP at this time. Further studies will be needed to more clearly distinguish between specialty and advanced-level practice of dietetics educators and preceptors. Future practice audits will confirm actions or standards as levels of competency. These two levels of practice in education of dietetics practitioners are delineated in the standards.

Generalist

Any RD serving as a dietetics educator and/or preceptor is expected to be able to perform the stated task or demonstrate the stated subject content. If not able to perform the task or demonstrate stated subject content, the RD is taking action to gain needed knowledge and skills.

A dietetics educator at the generalist level could be a practitioner who is serving as a DI, CP, or DTP preceptor, or a practitioner who is serving as the director of a CADE program (ie, DPD, DI, CP, or DTP) or a faculty member of a higher education institution (community college, or junior college, college or university) who is part of a CADE educational program (ie, DPD, CP, DI, or DTP) either as the program director or as an educator.

If the RD is a practitioner, he or she may or may not have experience in student or dietetic intern education (ie, he or she may have experience with client education but not undergraduate education) but has expertise in their specific field of practice (eg, community nutrition, oncology, or management).

If an RD is an educator, but not necessarily a practitioner, he or she may or may not have actual, recent clinical dietetics practice experience but does have expertise in higher education and research.

A dietetics educator at the generalist level will be able to define/measure student/dietetic intern learning outcomes and program requirements as

required by CADE for accreditation and design/conduct/evaluate some forms of research at the minimal level of the assistant professor (minimal only as compared to full professor status requirements).

Specialty/Advanced

RDs serving as EODP at this level have a thorough understanding of the elements noted in the specific indicator. These RDs have a range of skills and judgments acquired through a combination of experience and education. In the professional practice setting, these RDs are preceptors and/or adjunct instructors who perform at the specialty or advanced level of their practice-specific SOPP, as applicable. At the college and university level, these RDs are active in scholarly activity (see Glossary) as defined by the institution. Scholarly activity includes discovery (research and publication), learning (teaching), and engagement (extension, outreach).

An RD who is a practitioner serving as a DI or CP or DTP preceptor, or a practitioner who is serving as the director of a CADE program (eg, DPD, DI, CP, or DTP) would be considered to have met the specialty/advanced level as an educator according to the indicators. This may be a different measure of expertise and success than what is used to indicate expertise in their specific clinical practice area.

An RD who is a faculty member at a college or university who is serving as part of one or more CADE educational programs either as the program director or as an educator will achieve the specialty/advanced level as measured by the SOPP indicators. These measures may or may not be different than that expected for an individual's success in promotion and tenure. For example, an individual at the generalist level may be an assistant professor, whereas an individual at the specialty/advanced level may be an associate or full professor.

An RD who effectively participates in or generates research, such as those who serve as principal investigators, have an established research program, pursue grant funding, and publish in peer-reviewed journals contributing to new knowledge, meet the specialty/advanced level as measured by the SOPP indicators.

These standards, along with ADA's Code of Ethics, answer the question:

“What knowledge and skills must an RD demonstrate to deliver the required educational components to those who will be providing dietetics/nutritional services to clients as well as to peers and colleagues as part of faculty development?” (see Figure 1, available at www.adajournal.org, for a definition of client.)

OVERVIEW

Dietetics education is a triple-faceted educational structure composed of didactic, supervised practice, and professional growth components. These include undergraduate education through DPD, CP, and DTP and supervised practice for CP, DI, and DTP, all of which are accredited by the CADE (5), along with continuing professional education opportunities for RDs, DTRs, and RD preceptors and educators.

RDs who are dietetics educators and preceptors must remain competent in the knowledge, delivery, and assessment of dietetics education-related services. During the past decade the pedagogy (see Glossary) of teaching and learning has shifted from “teacher-centered” to “learner-centered.” Educators must keep current with new methods and learn and utilize technological advancements when interacting with all learners, such as the use of student-centered learning methods (6), interactive lessons and assignments, and/or distance education formats/platforms. The current paradigm in education results in RDs being lifelong learners in a progressive, professionally planned manner. Beginning students are encouraged to create knowledge and understanding as a result of the empowerment received from a teacher who was a facilitator of learning, not merely an instructor (7). As RDs progress from student to intern to professional, the responsibility for learning shifts from the teacher or preceptor's ability to teach to the learner's ability to derive meaning from exposure to information and situations (8). In addition, according to their practice area, it is imperative that RD educators understand the Nutrition Care Process and Standardized Language and their application within the dietetics profession (9,10); utilize current evidence-based concepts in medical nutrition therapy; and recognize emerging trends in community and public health nutrition, food sci-

ence, nutrigenomics, food security, food sustainability, and practice management to deliver adequate and appropriate client and student/dietetic intern education.

CADE (5) notes that faculty in dietetics education programs must play integral roles in the planning and defining of educational goals and outcomes of both the programs and the constituents. The Commission on the Future of Higher Education's report (11), the Association of American Colleges and Universities (12), and others use achievement of postsecondary education to provide specific information relating to the results of education, to include cost effectiveness and achievement of student learning outcomes. The SOPP for EODP are a tool to assist dietetics educators and preceptors who are faculty members in higher education in accomplishing designated professional endpoints. Dietetics educators and preceptors who are staff members in the different areas of dietetics practice, such as the health care or community health settings, might use the SOPP for EODP to demonstrate to their clients examples of the range of dietetics knowledge, application skills, and education delivery that may be of value in their practice setting. Figure 1 (available online at www.adajournal.org) shows the overview of the SOPP for RDs who are EODP.

The SODPF was developed as a cornerstone for all members of the dietetics profession. According to ADA, the definition of dietetics as a profession is, “The integration and application of principles derived from the sciences of food, nutrition, management, communication, and biological, physiological, behavioral, and social sciences to achieve and maintain optimal human health with flexible scope of practice boundaries to capture the breadth of the profession.” (2,3). The SODPF identifies three core evaluation resources for use by individual practitioners, in conjunction with relevant state, federal, and licensure laws, as methods by which practitioners can gauge the depth and breadth of their performance (3). These evaluation tools, the SOP in Nutrition Care, SOPP, and Code of Ethics, are helpful in assisting practitioners in determining whether a particular activity falls within his or her own scope of practice and the current and de-

Specialty/Advanced Practice RD in Education of Dietetics Practitioners

- Advanced practice level RDs have acquired the proficient and expert knowledge base, complex decision-making skills, and practice competencies for specialty level practice, the characteristics of which are shaped by the context in which an RD practices.
- Advanced practice RDs practice from both expanded and specialized knowledge, skills, competencies, and experience.
- Specialization is concentrating or delimiting one's focus to part of the whole field of dietetics (eg, ambulatory care, long-term care, diabetes, renal, pediatric, private practice, community nutrition, nutrition support, research, sports dietetics, or education).
- Expansion refers to the acquisition of new practice knowledge and skills, including the knowledge and skills that legitimize role autonomy within areas of practice that may overlap traditional boundaries of dietetics practice.
- Specialty/advanced level practice is characterized by the integration of a broad range of unique theoretical, research-based, and practical knowledge that occurs as a part of training and experience beyond entry level.
- Specialty/advanced practice RDs are either certified or approved to practice in their expanded, specialized roles.
- Specialty/advanced practice does not always include an additional certification beyond RD certification.
- Specialty Certification is not a prerequisite for Advanced Practice Certification; however, certification may be one way of demonstrating advanced practice competency

The Commission on Dietetic Registration offers five specialty certifications^a:

- Board Certified Specialist in Pediatric Nutrition (CSP)
- Board Certified Specialist in Renal Nutrition (CSR)
- Board Certified Specialist in Sports Dietetics (CSSD)
- Board Certified Specialist in Gerontological Nutrition (CSG)
- Board Certified Specialist in Oncology Nutrition (CSO)

Examples of specialty and/or advanced certifications currently available to RDs:

- Certified Diabetes Educator (CDE)
- Certified Nutrition Support Clinician (CNSC)
- Board Certified in Advanced Diabetes Management (BC-ADM)

Educational preparation for the specialty/advanced dietetics educator or preceptor^b may include one or more of the following characteristics^c:

- Educational preparation beyond a bachelor's degree
- May include a formal educational program preparing for advanced practice
- Dietetics practice roles accredited or approved
- May include a formal system of certification and credentialing
- May include specialization specific to doctorate, education in teaching/learning, or adult learning theory

Nature of Practice

- Integrates research, education, practice, and management
- High degree of professional autonomy and independent practice
- Case management/own case load
- Advanced health assessment skills, decision-making skills, and diagnostic reasoning skills
- Nonclinical advanced practice (eg, business, communications) may not include all characteristics; however, the complexity of the nature of practice will be comparable
- Recognized advanced clinical/practice competencies
- Plans, implements, and evaluates programs
- Conducts research specific to education or other topics
- Publishes in refereed journals
- Participates in grant writing

Experience

- Experience beyond entry-level is required.

Figure 3. American Dietetic Association (ADA) definition of specialty/advanced practice from the ADA Scope of Dietetic Practice Framework. For use by registered dietitians (RDs) who participate in dietetics education. Specialty and advanced are differentiated only as relates to an individual RD's practice domain. The specialty RD level is defined for those primarily employed within the framework of actual dietetics practice, such as in the settings of health care, community nutrition, business, and practice management. This RD may be practicing at an advanced level within their primary practice. This individual may be an experienced preceptor or the program director in the primary practice setting. The advanced RD level is defined for those primarily employed within the structure of higher education, such as colleges and universities. ^aCDR does not currently offer any advanced level certifications in any specific practice. ^bA preceptor is a teacher, an instructor, an expert, or a specialist, such as a registered dietitian, who provides practical experience and training to a student, especially of medicine, nursing, or dietetics. ^cSpecialty/advanced practice encompassed by the Standards of Professional Performance for RDs in Education of Dietetic Practitioners typically implies a postgraduate degree level (master's degree, doctorate of education or doctorate of philosophy).

How to Use the Standards of Professional Performance for Registered Dietitians (Generalist, Specialty/Advanced) in Education of Dietetics Practitioners as Part of the Professional Development Portfolio Process

<ul style="list-style-type: none"> ● Reflect 	<p>Assess your current level of practice and whether your goals are to expand your practice or maintain your current level of practice. Review the Standards of Professional Performance to determine what you want your future practice to be, and assess your strengths and areas for improvement. These documents can help you set short- and long-term professional goals.</p>
<ul style="list-style-type: none"> ● Conduct learning needs assessment 	<p>Once you have identified your future practice goals, review the Standards of Professional Performance to assess your current knowledge, skills, and behaviors, and define what continuing professional education is required to achieve the desired level of practice.</p>
<ul style="list-style-type: none"> ● Develop a learning plan 	<p>Based on your review of the Standards of Professional Performance, develop a plan to address your learning needs as they relate to your desired level of practice.</p>
<ul style="list-style-type: none"> ● Implement learning plan 	<p>As you implement your learning plan, keep reviewing the Standards of Professional Performance to reassess knowledge, skills, and behaviors and your desired level of practice.</p>
<ul style="list-style-type: none"> ● Evaluate the learning plan process 	<p>Once you achieve your goals to reach or maintain your desired level of practice, it is important to continue to review the Standards of Professional Performance to reassess knowledge, skills, and behaviors and your desired level of practice.</p>

Figure 4. How to use the Standards of Professional Performance for Registered Dietitians (Generalist, Specialty/Advanced) in Education of Dietetics Practitioners as part of the Professional Development Portfolio Process.^a ^aThe Commission on Dietetic Registration Professional Development Portfolio Process is divided into five interdependent steps that build sequentially upon the previous step during each 5-year recertification cycle and succeeding cycles.

sired level of performance. The core SOP in Nutrition Care and SOPP were published in the September 2008 issue of the *Journal of the American Dietetic Association* (1). Within this framework, the SOP in Nutrition Care and SOPP are designed as blueprints to accommodate the development of specialty and advanced-level practice standards for RDs in practice-specific areas (1,2).

The SOPP for EODP differ from previously published standards (1,2) in that the professional growth and development of dietetics educators do not directly relate to the SOP in Nutrition Care due to the patient-centered focus of the SOP.

As previously mentioned, the SOPP are authoritative statements that describe a minimum competent level of behavior in the professional role and

are reflective of the characteristics of a profession. These characteristics include activities related to quality of care and administrative practice, performance appraisal, education, professional environment, ethics, collaboration, research, and resource utilization. Categorized behaviors that correlate with professional practice are divided into six separate standards (1), which are described in Figure 2 (available online at www.adajournal.org).

RD EODP may use the SOPP to:

- identify the competencies needed to provide quality education and service based on client expectations and needs;
- self-assess if they have the appropriate knowledge base and skills to provide effective education to their clients;

- identify the areas in which additional knowledge and skills are needed to provide effective education and service to their clients;
- provide a foundation for public accountability;
- assist management in the planning of services and resources;
- enhance professional identity;
- benchmark skills and abilities in the required process of promotion and tenure for those who are faculty members in higher education; and
- guide the development of quality education programs for RDs and DTRs.

At the present time, there are no specialty practice certifications for RDs who are EODP. Thus, there is a lack of other benchmarking tools to assist practitioners in gauging his or her current level of practice. The SOPP for EODP are a first step toward documenting skill levels of dietetics educators and preceptors and will help to define practice levels as the DEP DPG explores the development of specialty and advanced practice certification through CDR.

The standards were developed through consensus and expert opinion and will be revisited and revised, as applicable, every 5 years to reflect changes in universal education theories and requirements/expectations from CADE and CDR.

APPLICATIONS TO PRACTICE

The Dreyfus model identifies levels of proficiency from novice to expert during the acquisition and development of knowledge and skills and is a helpful model for viewing the level of practice context for the SOPP for RDs in education of dietetics practitioners (13). RDs new to the specialty of education experience a steep learning curve. Three stages of proficiency—novice, proficient, and expert—reflect this development process. In the SOPP for EODP, these three stages are represented as the generalist and the combination echelon of specialty/advanced level practice (Figure 3).

In applying this concept to education of dietetics practitioners, it is recognized that even experienced RDs start at the novice stage when practicing in a new setting. At the novice stage (generalist level), an RD is a

Role	Example of use of SOPP
Clinical practitioner (eg, may participate as preceptor ^a , mentor, or guest lecturer)	The hospital employing an RD in general clinical practice has agreed to have that RD participate as a preceptor for dietetics education programs. The RD is unfamiliar with the roles and responsibilities of being a preceptor in dietetics education and reviews the SOPP to determine specific skills and competencies that may be required and compares those skills to his or her own. The RD identifies some skills and competencies that currently require development and sets goals to improve competency in this area of practice or mentoring to students, dietetic interns, dietetic technician interns, and/or practitioners.
Manager (eg, may participate as preceptor, mentor, or guest lecturer)	A manager who oversees a number of RDs has agreed to have the RD staff participate as preceptors or mentors to students, dietetic interns, dietetic technician interns, and/or practitioners. The manager will consider the SOPP when assembling teams of individuals who practice at varying levels of competence. For example, teams may consist of several relatively novice professionals who are supervised by more advanced RDs. The manager also recognizes the SOPP as an important tool for staff to use to assess their own competencies and to use as the basis for identifying personal performance plans in the area of education.
Individual not currently employed in dietetics education	After several years of being out of the academic arena, an RD decides to re-enter this practice area. The RD plans to apply to various academic institutions that have nutrition and dietetics programs and uses the SOPP to identify skills and competencies that are required at the generalist level. The RD includes acquisition of needed knowledge, skills, and competencies in his or her Professional Development Portfolio and initiates activities to attain some or all of them before pursuing employment applications.
Public health practitioner (eg, may participate as preceptor, mentor, or guest lecturer)	An RD working in a Women, Infants, and Children program has agreed to participate as a preceptor or mentor to practitioners and/or students in accredited dietetics education programs. The RD uses the SOPP to evaluate the level of competence needed to provide quality educational opportunities to these individuals and sets goals to improve competency in this area of practice before performing preceptor/mentor activities.
Researcher (eg, may participate as preceptor, mentor, or guest lecturer)	An RD working in a research setting is awarded a grant to demonstrate the role of different educational methods used by the RD and the influence of these methods on students; dietetic technicians, registered; and RDs. The RD uses the SOPP to assist in development of the research protocol.
Dietetics educator	The RD in higher education serving as program director or instructor for accredited dietetics education programs develops tools to use in educational activities that reflect application of the SOPP for EODP.
RD in a nontraditional dietetics position (eg, may participate as preceptor, mentor, or guest lecturer)	The RD uses the SOPP as an evaluation tool to demonstrate that the program uses a continuous quality improvement approach to ongoing competence of the RD providing education.

Figure 5. Case examples of Standards of Professional Performance (SOPP) for Registered Dietitians (RDs) (generalist, specialty/advanced) in Education of Dietetics Practitioners. ^aA preceptor is a teacher, an instructor, an expert, or a specialist, such as a registered dietitian, who provides practical experience and training to a student, especially of medicine, nursing, or dietetics.

new dietetics educator and/or preceptor and is learning the principles that underpin the teaching and learning patterns of professionals as well as appropriate educational theories and methods. In the Dreyfus model, the proficient stage is the equivalent of specialty practice whereas the expert stage is the equivalent of advanced practice (13). At the time of preparation of these SOPP, data do not exist to support the description of distinctions within generalist, specialty, and

advanced practice for dietetics educators and preceptors. Just as the Phase 2 Future Practice and Education Task Force report (14) acknowledges the need for specific study of advanced level dietetics practice, the DEP DPG recognizes the lack of description for specialty and advanced practice in dietetics education. In this SOPP for EODP, specialty and advanced are differentiated only as relates to an individual RD's practice domain. The specialty-level RD in di-

etetics education is defined for those primarily employed within the framework of actual dietetics practice, such as in the settings of health care, community nutrition, business, and practice management. This individual may be practicing at an advanced level within their primary practice and/or this individual may be an experienced preceptor or the program director (ie, CP, DI, or DTP) in the primary practice setting. An Advanced-level RD in dietetics educa-

tion is defined for those primarily employed within the structure of higher education, such as colleges and universities. Thus, in applying the Dreyfus model, an RD who is a dietetics educator or preceptor practicing at the proficient stage (specialty level) demonstrates a deeper understanding of education principles and expectations and is able to modify and apply these principles according to the educational situation (13). Finally, within the Dreyfus model, an RD at the expert stage (advanced practice level) has developed a more intuitive understanding of education and practice and demonstrates a range of highly developed skills and judgments acquired through a combination of experience and education (13). Because the advanced practice level requires the application of complex knowledge of educational principles and activities coupled with dietetics knowledge and the requirements and expectations of the position's promotion and tenure, a practitioner draws not only on his or her teaching experience, but also on the experience of the profession as a whole. Experts, with their extensive experience and ability to see the significance and meaning within a contextual whole, are fluid and flexible in educational delivery modes and methods.

RDs who are dietetics educators and preceptors should review the SOPP for EODP at regular intervals to evaluate current, preferred, and/or desired level of competency. Regular self-evaluation is important to identify opportunities to improve and enhance professional performance. It also helps RDs in the use of the CDR Professional Development Portfolio (4) to demonstrate the process of self-assessment, planning, improvement, and commitment to lifelong learning. The SOPP for EODP can be used at each of the five steps in the Professional Development Portfolio process (Figure 4). RDs are encouraged to pursue additional training, regardless of practice setting, to expand their personal scope of educational delivery and assessment

methods. Individuals are expected to practice at the level at which they are competent and this will vary depending on a practitioner's education, training, personal and professional experiences, educational setting, and institutional policy (15).

The SOPP for EODP do not specifically differentiate between specialty- and advanced-level practice because this distinction is captured in the knowledge, experience, and intuition demonstrated in the context of actual practice at the advanced level, combining dimensions of understanding, performance, and value as an integrated whole (16). A wealth of untapped knowledge is embedded in the experience, understanding, and practice of advanced-level dietetics educators. This knowledge and the skills acquired with it will expand and fully develop to be captured in refined indicators as advanced-level RDs systematically record what they learn from their own experience of advanced-level practice using educational exemplars. Educational opportunities are observed by experienced educators and analyzed to make new connections between opportunities and ideas, thus producing a synthesized whole. Educational exemplars describe outstanding examples of the actions of individuals in educational settings or professional activities that have changed and enhanced the education of students, interns, and practitioners. One example of change in educational practices includes assisting learners in the use of critical thinking and problem-solving skills relative to addressing problems in real-life situations. A learner might practice interdisciplinary team interaction skills to address a problem using cooperation and collaboration with others. Other exemplars include a brief description of the need for action and the process used to change the outcome (8,17-19). Many times these educational exemplars are described and explained, demonstrated and showcased in "DEPLine" (the DEP DPG newsletter), on the DEP

listserv, and at annual DEP area meetings.

The SOPP for EODP provides a means to guide and assess professional development for educators. See Figure 5 for examples. A recent report supported by the ADA House of Delegates recognizes the need for more deliberate professional recognition and growth for educators (14). Similarly, DEP has identified goals and strategies to assist the educators of future food and nutrition professionals in their quest for professional development. The promotion of the scholarship of teaching and learning and the development of an educator's mentoring program will require the use of the SOPP for RDs in education of dietetics practitioners. Another example includes the use of the SOPP for education of dietetics practitioners in performance standards for promotion and tenure. The standards provide guidelines to benchmark performance as a program director, preceptor, instructor or faculty for DPD, CP, DI, or DTP. The SOPP may also be incorporated into institutional standards.

CONCLUSIONS

The SOPP for RDs in education of dietetics practitioners are key professional development resources for future practitioners and RDs at points along the educational continuum. These standards are works in progress and will be reviewed every 5 years for content and applicability. Further studies will be needed to discriminate between generalist-, specialty-, and advanced-level practice of dietetics educators and preceptors. As a quality initiative of ADA and the DEP DPG, the standards themselves are an application of continuous process improvement concepts, reflecting a commitment to ongoing assessment and improvement. Education of future food and nutrition professionals will be enhanced and strengthened as dietetics educators and preceptors apply the SOPP for RDs in education of dietetics practitioners in their respective practice settings.

GLOSSARY

Evidence-based guidelines: Evidence-based guidelines are determined by scientific evidence or, in the absence of scientific evidence, expert opinion or, in the absence of expert opinion, professional standards. (Source: National Committee for Quality Assurance QI 9: Clinical Practice Guidelines, Element A: Evidence-based guidelines. *2009 Standards and Guidelines for Accreditation of Health Plans*. Washington, DC: National Committee for Quality Assurance; 2009.)

Pedagogy: The art or science of teaching; education; instructional methods.

Preceptor: A teacher, an instructor, an expert, or specialist, such as a registered dietitian, who provides practical experience and training to a student, especially of medicine, nursing, or dietetics.

Scholarly activity: Defined differently across institutions of higher education; for example, from http://www.csufresno.edu/aps/forms_policies/apm/documents/325_003.pdf: a) as a teacher-scholar strengthening and updating professional expertise for classroom instruction (Scholarship of Teaching); b) as a scholar strengthening and broadening the faculty member's scholarly and academic credentials (Scholarship of Discovery); c) as a practitioner engaging in both theory and application (Scholarship of Application); and d) as an integrated scholar placing specialties in a broader context (Scholarship of Integration).

These standards have been formulated to be used for individual self-evaluation and the development of practice guidelines, but not for institutional credentialing or for adverse or exclusionary decisions regarding privileging, employment opportunities or benefits, disciplinary actions, or determinations of negligence or misconduct. These standards do not constitute medical or other professional advice, and should not be taken as such. The information presented in these standards is not a substitute for the exercise of professional judgment by a health care professional. The use of the standards for a purpose other than that for which they were formulated must be undertaken within the sole authority and discretion of the user.

References

1. American Dietetic Association Quality Management Committee. American Dietetic Association Revised 2008 Standards of Practice for Registered Dietitians in Nutrition Care; Standards of Professional Performance for Registered Dietitians; Standards of Practice for Dietetic Technicians, Registered, in Nutrition Care; Standards of Professional Performance for Dietetic Technicians, Registered. *J Am Diet Assoc*. 2008;108:1538-1542.
2. Kieselhorst K, Skates J, Pritchett E. American Dietetic Association: Standards of Practice in Nutrition Care and the Updated Standards of Professional Performance. *J Am Diet Assoc*. 2005;105:641-645.
3. O'Sullivan-Maillet J, Skates J, Pritchett E. American Dietetic Association: Scope of Dietetics Practice Framework. *J Am Diet Assoc*. 2005;105:634-640.
4. Weddle DO. The professional development portfolio process: Setting goals for credentialing. *J Am Diet Assoc*. 2002;102:1439-1444.
5. Commission on Accreditation for Dietetics Education. *Eligibility Requirements and Accreditation Standards*. Chicago, IL: American Dietetic Association; 2008.
6. Johnson D, Johnson R, Smith K. *Active Learning: Cooperation in the College Classroom*. Edina, MN: Interaction Book Company; 1998.
7. Hansen EJ, Stephens JA. The ethics of learner-centered education: Dynamics that impede the process. *Change (New Rochelle)*. 2000;33:40-47.
8. Huba ME, Freed JE. *Learner-Centered Assessment on College Campuses*. Boston, MA: Allyn and Bacon; 2000.
9. Lacey K, Pritchett E. Nutrition Care Process and Model: ADA adopts road map to quality care and outcomes management. *J Am Diet Assoc*. 2003;103:1061-1072.
10. *International Dietetics & Nutrition Terminology (INDT) Reference Manual: Standardized Language for the Nutrition Care Process*. Chicago, IL: American Dietetic Association; 2008.
11. The Secretary of Education's Commission on the Future of Higher Education. *A Test of Leadership, Charting the Future of US Higher Education*. Washington, DC: Department of Education; 2006.
12. *General Education and Outcomes That Matter in a Changing World: General Education Conference (Phoenix AZ)*. Washington, DC: Association of American Colleges and Universities; 2006.
13. Dreyfus HL, Dreyfus SE. *Mind over Machine: The Power of Human Intuitive Expertise in the Era of the Computer*. New York, NY: Free Press; 1986.
14. *Report of the Phase 2 Future Practice and Education Task Force*. Chicago, IL: American Dietetic Association; 2008.
15. Gates G. Ethics opinion: Dietetics professionals are ethically obligated to maintain personal competence in practice. *J Am Diet Assoc* 2003;103:633-635.
16. Chambers DW, Gilmore CJ, Maillet JO, Mitchell BE. Another look at competency-based education in dietetics. *J Am Diet Assoc*. 1996;96:614-617.
17. Boyer E. *Scholarship Reconsidered: Priorities for the Professoriate*. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching; 1990.
18. Glassick C, Huber M, Maeroff G. *Scholarship Assessed: Evaluation of the Professoriate*. San Francisco, CA: Jossey-Bass; 1997.
19. Parks SC, Schiller MR, Bryk J. President's page: Investigate in our future—The role of science and scholarship in developing knowledge for dietetics practice. *J Am Diet Assoc*. 1994;94:1159-1161.

ADA Standards of Professional Performance for Registered Dietitians (Generalist, Specialty/Advanced) in Education of Dietetics Practitioners

SOPP for RDs in EODP are authoritative statements that describe a competent level of behavior in the professional role, including activities related to provision of services, application of research, communication and application of knowledge, use and management of resources, quality in practice, continued competence, and professional accountability (six separate standards).

Each standard is equal in relevance and importance and includes a definition, a rationale statement, indicators, and examples of desired outcomes. A standard is a collection of specific outcome-focused statements against which a practitioner's performance can be assessed. The rationale statement describes the intent of the standard and defines its purpose and importance in greater detail. Indicators are measurable, quantifiable, concrete action statements that illustrate how each specific standard can be applied in practice. Indicators serve to identify the level of performance of competent practitioners and to encourage and recognize professional growth. Standard definitions, rationale statements, core indicators, and examples of outcomes found in American Dietetic Association SOPP are not altered for RDs who are dietetics educators and preceptors^a. For those RDs the indicators are expanded upon to reflect the unique competence expectations of an RD who is a dietetics educator and/or preceptor for students and learners including, but not limited to, entry-level RDs and dietetic technicians, registered. All indicators may not be applicable to an individual RD's practice. Likewise, each indicator may not be applicable to all situations.

The term *client* is used in this evaluation resource as a universal term. Client also implies: patient, resident, customer, participant, consumer, community, individual, or any group receiving food and nutrition services. In this instance *client* includes: student, intern, Commission for Accreditation of Dietetics Education, employment setting, academic institution, current and potential employers, peers, industry, and other customers/stakeholders and American Dietetic Association members. The SOPP are not limited to the clinical setting. The term *appropriate* is used in the standards to mean selecting from a range of possibilities, one or more of which would give an acceptable result in the circumstances.

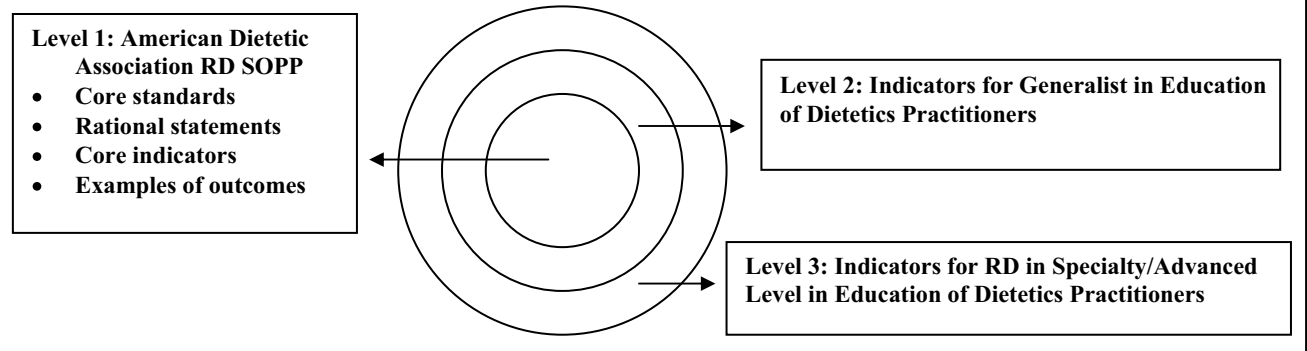


Figure 1. Overview of the Standards of Professional Performance (SOPP) for Registered Dietitians (RDs) in Education of Dietetics Practitioners.
^aA preceptor is a teacher, an instructor, an expert, or a specialist, such as a registered dietitian, who provides practical experience and training to a student, especially of medicine, nursing, or dietetics.

STANDARD 1: PROVISION OF SERVICES

Registered dietitians (RDs) provide quality education and service based on client expectations and needs.

Rationale: Quality education and service is provided, facilitated, and promoted based on an RD's knowledge, experience, and understanding of client needs and expectations.

INDICATORS FOR STANDARD 1: PROVISION OF SERVICES			An "X" signifies the level of practice for the indicator	
Indicators in bold type are adapted from the American Dietetic Association (ADA) Core RD SOPP			Generalist	Specialty/Advanced
Each RD in Education of Dietetics Practitioners:				
1.1	Understands and uses the concepts of the Nutrition Care Process, including standardized language in didactic and/or supervised practice experiences.		X	X
1.1A	Understands and uses the concepts of nutrition screening processes and parameters for efficiency and effectiveness in didactic and/or supervised practice experiences.		X	X
1.1B	Understands and uses standardized language within the Nutrition Care Process in didactic and/or supervised practice experiences.		X	X
1.1C	Understands and uses the concepts of nutrition protocols and policies within the Nutrition Care Process for target populations in didactic and/or supervised practice experiences.		X	X
1.1D	Understands and uses the concepts of the food/formulary delivery systems within the Nutrition Care Process in terms of the nutrition status, health, and well-being of target populations in didactic and/or supervised practice experiences.		X	X
1.1E	Understands and uses the concepts of the referral process and systems to facilitate public access to food and nutrition professionals in didactic and/or supervised practice experiences.		X	X
1.1F	Contributes knowledge related to the Nutrition Care Process and standardized language.		X	X
	1.1F1	Informs and/or educates others about the use of Nutrition Care Process and standardized language through providing case studies, leading workshops, and demonstrating actual use.		X
	1.1F2	Provides professional and technical expertise and new knowledge for ongoing revisions.		X
1.2	Collaborates with client (eg, student and/or intern and/or preceptor^a) to assess needs, background, and resources and to set priorities, establish goals, and create individualized action plans in didactic and/or supervised practice experiences.		X	X
1.2A	Creates and provides input into the development of appropriate curricula and educational methods to ensure that the educational process provides the exposure, experience and training necessary to meet the Commission on Accreditation for Dietetics Educators (CADE) foundation knowledge and/or core competencies for entry-level dietitians and dietetic technicians, registered.		X	X
	1.2A1	Utilizes evidence-based educational theories (eg student-centered learning approach; interactive learning) to determine appropriate curricula and education methods.	X	X
	1.2A2	Evaluates the effectiveness of curricula, and education methods.	X	X
	1.2A3	Conducts systematic assessment and evaluation of effectiveness of programs.		X
	1.2A4	Leads team on changes and process revisions as needed.		X

Figure 2. Standards of Professional Performance (SOPP) for Registered Dietitians (RDs) in Education of Dietetics Practitioners.

INDICATORS FOR STANDARD 1: PROVISION OF SERVICES			An "X" signifies the level of practice for the indicator	
Indicators in bold type are adapted from the American Dietetic Association (ADA) Core RD SOPP			Generalist	Specialty/Advanced
Each RD in Education of Dietetics Practitioners:				
	1.2B	Demonstrates understanding of current pedagogical theory related to the education of adult learners.	X	X
	1.2B1	Applies to practice current pedagogical theory related to the education of adult learners.	X	X
	1.2B2	Plans, develops, and implements systems of education based on current pedagogical theories related to adult learners.	X	X
	1.2B3	Utilizes evidence-based strategies (eg, problem-based learning, adult learning, and theories of behavior change) and available resources to plan and develop educational programs.	X	X
	1.2B4	Collaborates and coordinates with mentors and preceptors and other educators as appropriate.	X	X
	1.2B5	Conducts ongoing systematic reviews of course materials/resources and updates materials/resources (eg, books, modules) as indicated.		X
	1.2B6	Leads in using, evaluating, and communicating success related to the different theoretical frameworks (eg, problem-based learning) for education.		X
	1.2B7	Provides professional and technical expertise and new knowledge in pedagogical theory related to adult learners.		X
1.3	Informs and involves clients in decision making, including the development, monitoring, and reporting of learning outcomes in didactic and/or supervised practice experiences.		X	X
1.4	Recognizes client (eg, student and/or intern and/or preceptor) concepts of education and their cultural beliefs in didactic and/or supervised practice experience.		X	X
	1.4A	Teaches student and/or intern to recognize patient/client concepts of illness and their cultural beliefs.	X	X
	1.4B	Acknowledges that culture, sex, age, and previous educational and work experience influence learning and experience expectations.	X	X
	1.4C	Adapts methods to maximize the learning potential for diverse populations (eg, counseling approaches, content teaching modality, and electronic methods).		X
1.5	Teaches the concepts of the principles and application of knowledge and of disease prevention and behavior change appropriate for diverse populations in didactic and/or supervised practice experiences.		X	X
1.6	Collaborates and coordinates with colleagues.		X	X
	1.6A	Provides leadership to content development for education-focused publications and national meetings.		X
1.7	Applies knowledge and skills to determine appropriate action plans.		X	X

Figure 2. Continued

INDICATORS FOR STANDARD 1: PROVISION OF SERVICES		An "X" signifies the level of practice for the indicator	
Indicators in bold type are adapted from the American Dietetic Association (ADA) Core RD SOPP		Generalist	Specialty/Advanced
Each RD in Education of Dietetics Practitioners:			
1.8	Develops policies and procedures that reflect evidence-based guidelines^b and applicable laws and regulations.	X	X
	1.8A Implements programs and department policies and procedures consistent with evidenced-based methods, pertinent federal and state regulations and CADE standards and foundation knowledge and/or core competencies.		X
	1.8B Design and implement best teaching/instruction methods following systematic review of literature.		X
	1.8C Routinely reviews federal and state legislation related to education and dietetics practice (eg, student and/or intern advocacy, loans, or grants).		X
	1.8D Leads the process of updating program policies and procedures, protocols, guidelines, and tools.		X
1.9	Advocates for the provision of food and nutrition services as part of public policy.	X	X
	1.9A Participates in policy initiatives and networks with others.	X	X
	1.9B Leads advocacy activities/policy initiatives; authors articles and delivers presentations on topic.		X
1.10	Documents and maintains records of services and outcomes provided.	X	X
	1.10A Continuously evaluates processes and outcomes of programs.	X	X
	1.10B Utilizes a continuous quality improvement approach to measure performance against desired outcomes consistent with level of practice.		X
	1.10C Develops tools for analyzing process, performance and outcomes.		X
	1.10D Conducts data analysis, develops report of outcomes and improvement recommendations, and disseminates findings.		X

Examples of Outcomes for Standard 1: Provision of Services

- Clients participate in establishing goals.
- Clients' needs are met.
- Clients are satisfied with services and products.
- Evaluations reflect expected outcomes.

EXAMPLES OF IMPLEMENTATION—May follow semester-based timeline

- Review existing services and methods.
- Survey clients to assess/evaluate knowledge and skill levels, expectations, needs.
- Review education and dietetics-based literature.
 - Ensure using current teaching/learning and assessment/evaluation techniques.
 - Incorporate new/updated dietetics knowledge (ie, protocol for specific disease state; new food plan for WIC participants).
- Implement identified changes.
 - Assess
 - Evaluate
 - Redesign
- Continue review and modifications.

Figure 2. Continued

STANDARD 2: APPLICATION OF RESEARCH

RDs apply, participate in, or generate research to enhance practice.

Rationale: Application, participation, and generation of research promotes improved safety and quality of dietetic practice and services.

INDICATORS FOR STANDARD 2: APPLICATION OF RESEARCH		An "X" signifies level of practice for the indicator.	
Indicators in bold type are adapted from ADA Core RD SOPP		Generalist	Specialty/Advanced
Each RD in Education of Dietetics Practitioners:			
2.1	Accesses and reviews best available research findings for application to dietetics education and/or to support independent research program.	X	X
2.1A	Demonstrates understanding of research study design and methodology.	X	X
2.1B	Demonstrates understanding of interpretation and application potential of research study results.	X	X
2.1C	Identifies research questions pertinent to dietetics practice and education of students, interns, preceptors, and practitioners, and/or individual research program.		X
2.1 D	Utilizes systematic methods to extract answers that are based on scientific evidence.		X
2.1 E	Uses evidence-based tools as a basis for stimulating awareness and integration of current evidence.		X
2.2	Bases dietetics education on significant scientific principles and evidence-based guidelines.	X	X
2.2A	Reviews and applies evidence-based practice and education research.	X	X
2.2B	Uses evidence-based practice and education research and other data to reduce variation in dietetics education practice.		X
2.2C	Provides leadership in the implementation of evidence-based practice and education research findings.		X
2.3	Integrates evidence-based guidelines with clinical and managerial expertise and client values and/or individual research program.	X	X
2.3A	Participates in development of policies and procedures using evidence-based guidelines.	X	X
2.3B	Translates research findings into the development of policies, procedures, content, and guidelines for education of dietetics practitioners.		X
2.4	Promotes research through alliances and collaboration with food and nutrition and other professionals and organizations including other colleges and universities.	X	X
2.4A	Participates in research-focused service opportunities (eg, member of committees, task forces).	X	X
2.4B	Collaborates in practice-based research networks (eg, contributes to data collection for multi-institutional studies).		X
2.4C	Develops service opportunities into partnerships (eg, partnering in development of multi-institutional studies).		X

Figure 2. Continued

INDICATORS FOR STANDARD 2: APPLICATION OF RESEARCH		An "X" signifies level of practice for the indicator.	
		Generalist	Specialty/Advanced
Indicators in bold type are adapted from ADA Core RD SOPP			
Each RD in Education of Dietetics Practitioners:			
2.5	Contributes to the development of new knowledge and research in dietetics practice, education of dietetics practitioners, and/or other area of expertise.	X	X
2.5A	Participates in dietetics education of practitioners research studies and/or other area of research.	X	X
2.5B	Serves as principal investigator in dietetics education of practitioners, research studies, and/or other area of research expertise.		X
2.5C	Publishes dietetics education research studies and/or other area of research expertise in peer-reviewed journals (eg, <i>Journal of the American Dietetic Association</i>).		X
2.6	Collects measurable data and documents outcomes within practice setting of education of dietetics practitioners and/or other area of research expertise.	X	X
2.6A	Participates in collecting measureable data and outcomes.	X	X
2.6B	Utilizes collected data as part of process improvement to improve outcomes and quality of education.	X	X
2.6C	Conducts dietetics education, outcomes research, and other studies.		X
2.6D	Develops systematic processes to determine, define, collect, and analyze outcomes and other data.		X
2.6E	Monitors and evaluates aggregate data against expected outcomes.		X
2.7	Communicates research data and activities through publications and presentations.	X	X
2.7A	Presents dietetics practice and education research activities and results at the local level (eg, department meetings).	X	X
2.7B	Presents dietetics practice, education, and other research activities and results at the regional and national level (eg, Dietetic Educators of Practitioners [DEP] Dietetic Practice Group area meetings, ADA annual Food and Nutrition Conference and Expo).		X
2.7C	Publishes dietetics practice, education, and other research activities and results (eg, "DEP Line", education journals, and other peer-reviewed journals).		X

Examples of Outcomes for Standard 2: Application of Research

- Patient/client receives appropriate services based on the effective application of evidence-based guidelines.
- A foundation for performance measurement and improvement is established.
- Evidence-based guidelines are used for the development and revision of resources used in practice.
- Benchmarking and knowledge of best practices is used to evaluate and improve performance.

EXAMPLES OF IMPLEMENTATION—May follow semester-based timeline

- Apply research from scientific literature to coursework, practicums, preceptor training programs, and/or student/intern research projects.
- Utilize ADA's Evidence Analysis Library (EAL)
 - Instructor demonstrates and uses when introducing new material.
 - Student/intern incorporates into assignments, supervised practice, and research.
- Percentage of Didactic Program in Dietetics students accepted/not accepted in internship programs—why or why not; document and report results with comparison pre/post intervention.
- Percentage of Dietetic Technician Program students pass/not pass dietetic technician, registered, exam—why or why not; document and report results with comparison pre/post intervention.
- Percentage of Didactic Program in Dietetics students/Dietetic Internship participants pass/not pass RD exam—why or why not; document and report results with comparison pre/post intervention.
- Review of "scored" course evaluations; document and report results with comparison pre/post intervention.
- Disseminate findings from research at professional meetings and/or publication in peer-reviewed journals.

Figure 2. Continued

STANDARD 3: COMMUNICATION AND APPLICATION OF KNOWLEDGE

RDs effectively apply knowledge and communicate with others.

Rationale: RDs work with and through others to achieve common goals by effective sharing and application of their unique knowledge and skills in food, human nutrition, and management services.

INDICATORS FOR STANDARD 3: COMMUNICATION AND APPLICATION OF KNOWLEDGE		An “X” signifies the indicators for the level of practice.	
Indicators in bold type are adapted from ADA Core RD SOPP		Generalist	Specialty/Advanced
Each RD in Education of Dietetics Practitioners:			
3.1	Exhibits knowledge related to a particular aspect of the profession of dietetics including dietetics education.	X	X
3.1A	Familiar with major educational theory and practice publications.	X	X
3.1B	Incorporates regulatory, accreditation, and reimbursement programs and standards for institutions and providers that are specific to nutrition care and education into education programs.		X
3.1C	Applies public health trends and epidemiologic data to professional practice and education programs.		X
3.1D	Participates in ongoing research in education theory and practice.		X
3.1E	Provides professional and technical expertise and new knowledge to a particular aspect of dietetics, including dietetics education.		X
3.2	Communicates and applies scientific principles, research, and theory.	X	X
3.2A	Demonstrates critical thinking, reflection, and problem-solving skills when communicating with clients, preceptors, and future employers.	X	X
3.3	Selects appropriate information and best method or format for presenting in writing or verbally when communicating information.	X	X
3.4	Integrates knowledge of food and human nutrition with knowledge of health, social sciences, communication, and management in the provision of education to future dietetics practitioners.	X	X
3.4A	Demonstrates ability to integrate new knowledge of dietetics and education practice in varied contexts (eg, differing education environments such as undergraduate/graduate, students, interns, preceptors, colleagues).	X	X
3.5	Shares knowledge and information with clients, colleagues, and the public.	X	X
3.5A	Develops educational materials for clients.	X	X
3.5B	Serves as author for articles for consumers and professional groups.		X
3.5C	Serves as invited reviewer, author, and presenter at local and regional meetings and media outlets.		X
3.5D	Serves as invited reviewer, author, and presenter at national, international meetings, and media outlets.		X
3.5E	Serves in leadership role for publications (ie, editor, editorial advisory board) and program planning committees.		X
3.5F	Functions as an opinion leader.		X
3.6	Guides students, interns, and clients in the application of knowledge and skills.	X	X
3.6A	Serves as preceptor in supervised practice settings.	X	X
3.6B	Develops mentor and preceptorship and/or educational delivery methods/programs that promote dietetics practice and education.		X

Figure 2. Continued

INDICATORS FOR STANDARD 3: COMMUNICATION AND APPLICATION OF KNOWLEDGE		An "X" signifies the indicators for the level of practice.	
Indicators in bold type are adapted from ADA Core RD SOPP		Generalist	Specialty/Advanced
Each RD in Education of Dietetics Practitioners:			
3.7	Seeks current and relevant information related to practice.	X	X
3.7A	Documents interpretation of relevant information and results of communication with students/interns, preceptors, and future employers.	X	X
3.7B	Conducts literature searches and facilitates networking opportunities to provide service to stakeholders.	X	X
3.7C	Attends conferences and meetings to share information and network.	X	X
3.7D	Builds relationships between researchers and decision makers so that effective knowledge transfer can take place.		X
3.7E	Provides commentary and analysis of relevant information.		X
3.7F	Presents information to establish collaborative practice at a systems level (eg, a student/intern learning outcomes assessment program).		X
3.7G	Negotiates and/or establishes changes at systems level for new advances in education of practitioners.		X
3.8	Contributes to the development of new knowledge.	X	X
3.8A	Serves on planning committees/task forces to conduct program review and/or develop/revise courses or supervised practice experiences.	X	X
3.8B	Participates in research and scholarly activity ^c to develop new knowledge.	X	X
3.8C	Serves as consultant to health care providers, business, industry, the American Dietetic Association, and other national organizations regarding education needs of consumers.		X
3.8D	Uses educational exemplars to generate new knowledge and develop new guidelines, programs, and policies in dietetics education.		X
3.9	Uses information technology to communicate, manage knowledge, and support decision making.	X	X
3.9A	Incorporates use of information technology into educational programs and curricula.	X	X
3.9B	Receives and shares information in utilizing electronic and Web-based technology.	X	X
3.9C	Develops Web-based education tools.		X
3.9D	Provides expertise in creating and utilizing electronic and Web-based technology specific to client environment and need.		X
3.10	Contributes to the multidisciplinary approach by promoting food and nutrition strategies that influence health and quality of life outcomes of target populations (eg, participates in patient care rounds, serves on coalition boards, participates in quality management teams).	X	X
3.11	Establishes credibility as a resource within the dietetics education practice area.	X	X

Examples of Outcomes for Standard 3: Communication and Application of Knowledge

- Expertise in food, nutrition, and management is shared.
- Individuals and groups:
 - Receive current and appropriate information.
 - Understand information received.
 - Know how to obtain additional guidance.

EXAMPLES OF IMPLEMENTATION—May follow a semester-based timeline

- Review curriculum, course descriptions, and objectives at least annually.
- Plan for classes, guest lecturers, facility tours, and practicum experiences.
- Schedule and coordinate nutrition courses provided to clients, such as preceptors, future/existing graduate employers.

Figure 2. Continued

STANDARD 4: UTILIZATION AND MANAGEMENT OF RESOURCES

RDs use resources effectively and efficiently.

Rationale: Mindful management of time, money, facilities, staff, and other resources demonstrates organizational citizenship.

INDICATORS FOR STANDARD 4: UTILIZATION AND MANAGEMENT OF RESOURCES		An "X" signifies level of practice for the indicator	
		Generalist	Specialty/Advanced
Indicators in bold type are adapted from the ADA Core RD SOPP			
Each RD in Education of Dietetics Practitioners:			
4.1	Uses a systematic approach to maintain and manage resources.	X	X
4.2	Quantifies management of resources in the provision of dietetic services and education of practitioners (eg, documents use of measurable resources such as personnel, monies, equipment, guidelines, protocols, reference materials, and time in the provision of dietetics education).	X	X
4.2A	Collects data from surveys and/or research (eg, employer and alumni surveys).	X	X
4.2B	Evaluates data from surveys and/or research (eg, employer and alumni surveys).	X	X
4.2C	Participates in strategic and operational planning of education programming.		X
4.2D	Manages effective delivery of educational programs.		X
4.2E	Leads in strategic and operational planning and curriculum design.		X
4.3	Evaluates safety, effectiveness, and value while planning and delivering educational services and products.	X	X
4.4	Participates in continuous quality improvement and documents outcomes relative to resource management and desired student/intern learning outcomes.	X	X
4.4A	Participates in data collection, collation, summarization, distribution, and/or reporting on findings; proposes possible resolution(s) to identified area(s) of concern to improve and/or maintain desired outcome(s).	X	X
4.4B	Proactively recognizes needs, anticipates outcomes and consequences of different approaches, and makes necessary modifications to plans/services/programs to achieve desired outcomes.		X
4.4C	Effects long-term thinking and planning; anticipates needs; fully understands strategic and operational plans and student/intern learning outcomes and integrates justification into plans.		X

Figure 2. Continued

INDICATORS FOR STANDARD 4: UTILIZATION AND MANAGEMENT OF RESOURCES		An "X" signifies level of practice for the indicator	
		Generalist	Specialty/Advanced
Indicators in bold type are adapted from the ADA Core RD SOPP			
Each RD in Education of Dietetics Practitioners:			
4.5	Assists clients, other individuals, and groups to identify and secure appropriate and available educational resources and services.	X	X
4.5A	Participates in identifying and securing appropriate didactic and/or supervised practice opportunities to achieve student/learning outcomes.	X	X
4.5B	Establishes administratively sound didactic and/or supervised practice programs (eg, curriculum in accordance with CADE standards and student/intern learning outcomes).		X
4.5C	Demonstrates ability to exercise leadership to achieve desired outcomes using influence gained through advanced competence to identify and secure appropriate and available resources and services.		X

Examples of Outcomes for Standard 4: Utilization and Management of Resources

- Documentation of resource use is consistent with plan.
- Data are used to promote and validate services.
- Desired outcomes are achieved and documented.
- Resources are effectively and efficiently managed.

EXAMPLES OF IMPLEMENTATION—May follow semester based timeline

- Identify possible resources to support research and teaching.
- Encourage students/interns to use available resources and take advantage of opportunities to learn and practice new skills.
- Encourage preceptors/mentors to use available resources and take advantage of opportunities to learn and practice new skills.
- Use computer based/distance learning educational methods when appropriate to save limited resources.

Figure 2. Continued

STANDARD 5: QUALITY IN PRACTICE

RDs systematically evaluate the quality of services and effectiveness of education of dietetics practitioners and improve practice based on evaluation results.

Rationale: Quality practice requires regular performance evaluation and continuous improvement.

INDICATORS FOR STANDARD 5: QUALITY IN PRACTICE		An "X" signifies the level of practice for the indicator.	
Indicators in bold type are adapted from the ADA Core RD SOPP		Generalist	Specialty/Advanced
Each RD in Education of Dietetics Practitioners:			
5.1	Knows, understands, and complies with federal, state, and local laws and regulations.	X	X
5.2	Understands pertinent national quality and safety initiatives (eg, Institute of Medicine, National Quality Forum, Institute for Healthcare Improvement).	X	X
5.3	Implements an outcomes management system to evaluate the effectiveness and efficiency of educational practice.	X	X
5.4	Understands and continuously measures quality of dietetic services and education in terms of pedagogy^d, CADE standards, educational process, and student/intern learning outcomes.	X	X
5.5	Identifies performance improvement criteria to monitor effectiveness of education services.	X	X
5.6	Tests interventions to improve educational processes and services with the objective of improving quality and student/intern learning outcomes.	X	X
5.7	Designs and tests interventions to improve the education process and service with the objective of improving quality and student/intern learning outcomes.	X	X
5.8	Identifies and addresses student/intern learning needs using educational processes/systems.	X	X
5.8A	Assists in identification and evaluation of educational processes to meet student/intern learning outcomes.	X	X
5.8B	Evaluates and improves educational processes to meet student/intern learning outcomes.		X
5.8C	Maintains awareness of potential problems associated with various educational delivery methods (eg, variances in receptivity related to generational differences, diversity issues, literacy, provider-centered vs learner-centered teaching/instruction styles).		X
5.9	Identifies expected student/intern learning outcomes.	X	X
5.9A	Assists in identifying expected student/intern learning outcomes as appropriate for didactic and/or supervised practice program.	X	X
5.9B	Leads in identifying expected student/intern learning outcomes as appropriate for didactic and/or supervised practice program.		X

Figure 2. Continued

INDICATORS FOR STANDARD 5: QUALITY IN PRACTICE			An "X" signifies the level of practice for the indicator.	
Indicators in bold type are adapted from the ADA Core RD SOPP			Generalist	Specialty/Advanced
Each RD in Education of Dietetics Practitioners:				
5.10	Documents achievement of student/intern learning outcomes.		X	X
5.11	Compares actual performance to expected student/intern learning outcomes.		X	X
5.12	Documents action taken when discrepancies exist between achievement and expected student/intern learning outcomes.		X	X
5.13	Continuously evaluates and refines educational methodology based on measured student/intern learning outcomes.		X	X
5.13A	Implements an outcomes management system to evaluate the effectiveness and efficiency of education.		X	X
	5.13A1	Utilizes collected data as part of a quality improvement process to improve student/intern learning outcomes.	X	X
	5.13A2	Systematically improves the processes of educational services to improve student/intern learning outcomes reflecting understanding of variations.		X
5.13B	Leads in creating and evaluating systems, processes, and programs that support institutional and CADE related core values and objectives.			X
	5.13B1	Serves in a leadership role to evaluate benchmarks of educational methodology (eg, theories of adult education, CADE standards, and institutional standards) to positively influence curriculum planning and development.		X

Examples of Outcomes for Standard 5: Quality in Practice

- Performance indicators are measured and evaluated.
- Aggregate outcomes results meet pre-established criteria (goals/objectives).
- Results of quality improvement activities direct refinement of practice.

EXAMPLES OF IMPLEMENTATION—May follow semester-based timeline:

- Review student/intern evaluations of courses, research, advisement, and/or supervised practice rotations as applicable.
- Evaluate test scores and overall student performance compared to expected and other classes.
- Query preceptors/mentors, employers, practitioners, regarding student/intern/graduate's readiness and performance.
 - Student level—first year, second year, third year, fourth year.
 - Intern level—ultimately perform at entry level; that is, meets or exceeds current CADE competencies upon supervised practice graduation.

Figure 2. Continued

STANDARD 6: COMPETENCY AND ACCOUNTABILITY

RDs engage in lifelong learning.

Rationale: Competent and accountable practice includes continuous acquisition of knowledge and skill development.

INDICATORS FOR STANDARD 6: COMPETENCY AND ACCOUNTABILITY			An "X" signifies level of practice for indicators	
			Generalist	Specialty/Advanced
Indicators in bold type are adapted from ADA Core RD SOPP				
Each RD in Education of Dietetics Practitioners:				
6.1	Conducts self-assessment of strengths and weakness at regular intervals.		X	X
	6.1A	Evaluates current practice at the individual and systems levels in light of current research findings at the generalist practice level (eg, adult education theories).	X	X
	6.1B	Evaluates current practice at the individual and systems levels in light of current research findings at the specialty/advanced practice level (eg, results from own research program).		X
6.2	Identifies needs for development from a variety of sources.		X	X
	6.2A	Seeks opportunities at the generalist practice level to develop professional mentor/protégé knowledge, skills, and attributes with colleagues, preceptors, and future employers.	X	X
	6.2B	Seeks opportunities at the specialty/advanced practice level to develop mentor/protégé programs with colleagues, preceptors, and future employers (eg, research collaboration opportunities).		X
6.3	Participates in peer review.		X	X
6.4	Mentors others.		X	X
	6.4A	Participates (assists) in mentoring students/interns.	X	X
	6.4B	Encourages student/intern relationships with food and nutrition professionals who will mentor them and further their knowledge in dietetics practice.	X	X
	6.4C	Assists in the development of mentor/protégé relationships.		X
	6.4C1	Trains and mentors peers and preceptors about nationally recognized educational practices.		X
	6.4C2	Evaluates the teaching effectiveness of mentors and preceptors of students/interns.		X
	6.4C3	Leads teams on changes and process revisions as needed.		X
	6.4C4	Coordinates internal and external reviews of the mentoring educational process utilizing input from clients.		X
6.5	Develops and implements a plan for professional growth.		X	X
6.6	Documents in professional portfolio examples of educational practices that describe and demonstrate the expanded professional role as a dietetics educator at the generalist or specialty/advanced level.		X	X

Figure 2. Continued

INDICATORS FOR STANDARD 6: COMPETENCY AND ACCOUNTABILITY		An "X" signifies level of practice for indicators	
		Generalist	Specialty/Advanced
Indicators in bold type are adapted from ADA Core RD SOPP			
Each RD in Education of Dietetics Practitioners:			
6.7	Adheres to the ADA Code of Ethics.	X	X
6.8	Assumes responsibility for actions and behaviors.	X	X
6.9	Integrates the ADA Standards of Practice and SOPP into self-assessment and development plans.	X	X
6.10	Applies research findings and best available evidence to practice.	X	X
6.10A	Familiarizes self with major education publications.	X	X
6.10B	Develops skill in accessing and critically analyzing research.	X	X
6.10C	Serves as an author of education-related publications and presenter for colleagues, preceptors, and future employers on topics related to educational theories and dietetics practice.		X
6.10D	Uses planned change principles at the specialty/advanced level of practice to integrate research and practice.		X
6.11	Obtains occupational certifications in accordance with federal, state, and local laws and regulations according to requirements of practice setting or professional practice constructs.	X	X
6.12	Seeks leadership opportunities.	X	X
6.12A	Utilizes habits of good interfacing (communication, information gathering, and practices) to lead in dietetics education practice.	X	X
6.12B	Serves on local, regional, and national planning committees/task forces for educators, health professionals, the American Dietetic Association, and industry.	X	X
6.12C	Develops innovative approaches to complex practice issues.		X
6.12D	Seeks opportunities to demonstrate integration of individual practice methodologies into larger systems (eg, institutional or state collaborative).		X

Examples of Outcomes for Standard 6: Competence and Accountability

- Self-assessments are completed.
- Directed learning is demonstrated.
- Development needs are identified.
- Practice reflects the ADA Code of Ethics.
- Practice reflects the ADA Standards of Practice and SOPP.
- Practice reflect best available evidence.
- Relevant certifications are obtained.
- Commission on Dietetic Registration recertification requirements are met.

^aA preceptor is a teacher, an instructor, an expert, or a specialist, such as a registered dietitian, who provides practical experience and training to a student, especially of medicine, nursing, or dietetics.

^bEvidence-based guidelines are determined by scientific evidence or, in the absence of scientific evidence, expert opinion or, in the absence of expert opinion, professional standards.

^cDefined differently across institutions of higher education; for example, from http://www.csufresno.edu/aps/forms_policies/apm/documents/325_003.pdf: a) as a teacher-scholar strengthening and updating professional expertise for classroom instruction (Scholarship of Teaching); b) as a scholar strengthening and broadening the faculty member's scholarly and academic credentials (Scholarship of Discovery); c) as a practitioner engaging in both theory and application (Scholarship of Application); and d) as an integrated scholar placing specialties in a broader context (Scholarship of Integration).

^dThe art or science of teaching; education; instructional methods.

Figure 2. Continued