

American Dietetic Association: Revised Standards of Practice and Standards of Professional Performance for Registered Dietitians (Generalist, Specialty, and Advanced) in Oncology Nutrition Care

Kim Robien, PhD, RD, CSO, LD, FADA; Lori Bechard, MEd, RD, LDN; Laura Elliott, MPH, RD, CSO, LD; Nicole Fox, RD, LMNT; Rhone Levin, MEd, RD, CSO, LDN; Sarah Washburn, MS, RD, CSO

Editor's note: Figures 1, 2, and 3 that accompany this article are available online at www.adajournal.org.

The Oncology Nutrition Dietetic Practice Group (ON DPG) of the American Dietetic Association (ADA), under the guidance of the ADA Quality Management Committee and Scope of Dietetics Practice Framework Sub-committee, has revised the Standards of Practice (SOP) and Standards of Professional Performance (SOPP) for Registered Dietitians (RDs) in Oncology Nutrition Care (see the Web site exclusive Figures 1, 2, and 3 at www.adajournal.org). The SOP and SOPP for RDs in Oncology Nutrition Care were originally published in 2006 (1), and were scheduled for periodic review and revision. The revised documents reflect advances in oncology nutrition practice during the past 3 years, including completion of the *ADA Oncology Nutrition Evidence Analysis Project*, the *ADA Oncology Evidence-Based Nutrition Practice Guideline*, and the development of the Board Certification

Approved October 2009 by the Quality Management Committee of the American Dietetic Association House of Delegates and the Executive Committee of the Oncology Nutrition Dietetic Practice Group of the American Dietetic Association. *Scheduled review date: February 2015.* Questions regarding the Revised Standards of Practice and Standards of Professional Performance for RDs in Oncology Nutrition Care may be addressed to ADA Quality Management Staff at quality@eatright.org; Sharon McCauley, MS, MBA, RD, LDN, FADA, Director of Quality Management or Cecily Byrne, MS, RD, LDN, Manager of Quality Management.

in Oncology Nutrition by the Commission on Dietetic Registration (CDR).

The revised standards replace the 2006 standards. The revised documents build on the ADA Revised 2008 SOP for RDs in Nutrition Care and SOPP for RDs (2). ADA's Code of Ethics (3) and the Revised 2008 SOP in Nutrition Care and SOPP for RDs (2) are decision tools within the Scope of Dietetics Practice Framework (4) that guide the practice and performance of RDs in all settings.

The concept of scope of practice is fluid (5), changing in response to the expansion of knowledge, the health care environment, and technology. An

RD's legal scope of practice is defined by state legislation (eg, state licensure law) and will differ from state to state. An RD may determine his or her own individual scope of practice using the Scope of Dietetics Practice Framework (4), which takes into account federal regulations; state laws; institutional policies and procedures; and individual competence, accountability, and responsibility for his or her own actions.

The Revised 2008 SOP in Nutrition Care and the SOPP for RDs are the result of a review and update of the 2005 ADA SOP in Nutrition Care and Updated SOPP (6) using information from 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. Consensus is group opinion based on expert knowledge and experience. The Quality Management Committee members represent diverse practice and geographic perspectives (2).

ADA's Revised 2008 SOP in Nutrition Care and SOPP reflect the minimum competent level of dietetics

K. Robien is an assistant professor, Epidemiology and Community Health, School of Public Health, and Member, Cancer Outcomes and Survivorship Program, Masonic Cancer Center, University of Minnesota, Minneapolis. **L. Bechard** is a clinical nutrition specialist III, Children's Hospital Boston, Boston, MA. **L. Elliott** is a clinical dietitian, Mary Greeley Medical Center, Ames, IA. **N. Fox** is a medical nutrition therapist specialist, The Nebraska Medical Center, Omaha. **R. Levin** is a clinical dietitian III, St Luke's Meridian Medical Center, Mountain States Tumor Institute, Meridian, ID. **S. Washburn** is a clinical dietitian, Seattle Cancer Care Alliance, Seattle, WA.
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practice and professional performance for RDs. ADA's SOP in Nutrition Care and SOPP (2) serve as blueprints for the development of practice-specific SOP and SOPP for RDs in generalist, specialty, and advanced levels of practice.

The SOP in Nutrition Care address the four steps of the Nutrition Care Process and activities related to client care (7). They are designed to promote the provision of safe, effective, and efficient food and nutrition services, facilitate evidence-based practice, and serve as a professional evaluation resource. The SOPP are authoritative statements that describe a competent level of behavior in the professional role. Categorized behaviors that correlate with professional performance are divided into six separate standards.

The SOP in Nutrition Care and SOPP are a guide for self-evaluation and expanding practice, a means of identifying areas for professional development, and a tool for demonstrating competence in delivering oncology nutrition care. They are used by RDs to assess their current level of practice and to determine the education and training required to maintain currency in their practice area and advancement to a higher level of practice. In addition, these standards may be used to assist RDs in transitioning their knowledge and skills to a new practice area. Like the SOP in Nutrition Care and SOPP, the indicators (measurable action statements that illustrate how each standard can be applied in practice; see [Figure 1](#) at www.adajournal.org) for the Revised SOP and SOPP for RDs in Oncology Nutrition Care were developed with input and consensus of content experts representing diverse practice and geographic perspectives and were reviewed and approved by the Executive Committee of the ON DPG, the Scope of Dietetics Practice Framework Sub-committee, and ADA's Quality Management Committee. In addition, a 2007 job analysis survey for oncology dietitians conducted by CDR provided information to support the standards developed for oncology RDs.

LEVELS OF PRACTICE

Three levels of practice in oncology nutrition care are defined: generalist, specialty, and advanced.

General Practitioner

A general practitioner (or generalist) is an individual whose practice includes responsibilities across several areas of practice, including, but not limited to, more than one of the following: community, clinical, consultation and business, research, education, and food and nutrition management (8). The generalist level also includes entry-level practitioners. An entry-level practitioner, as defined by CDR, has <3 years of registered practice experience and demonstrates a competent level of dietetics practice and professional performance.

Specialty Practitioner

A specialty practitioner is an individual who concentrates on one aspect of the profession of dietetics (8). This specialty may or may not have a credential and additional certification, but often includes expanded roles beyond entry level practice.

Advanced Practitioner

An advanced practitioner has acquired the expert knowledge base, complex decision-making skills, and competencies for expanded practice, the characteristics of which are shaped by the context in which he/she practices (8). Advanced practitioners may have expanded or specialty roles or both. Advanced practice may or may not include additional certification. Generally, the practice is more complex and the practitioner has a higher degree of professional autonomy and responsibility (see [Figure 4](#)).

These standards, along with the ADA's Code of Ethics (3), answer the questions: "Why is an RD uniquely qualified to provide oncology nutrition services?" and, "What knowledge, skills, and competencies does an RD need to demonstrate for the provision of safe, effective, and quality oncology nutrition care at the generalist, specialty, and advanced levels?"

OVERVIEW

Cancer is a complex, multifactorial disease state. Although often thought of as one disease, there are actually more than 200 different types of cancer, each with its own etiology, set of potential treatment regimens, and likelihood of response to treatment.

The American Cancer Society estimates that almost 1.5 million new cases of cancer will be diagnosed in the United States in 2009 (9). Fortunately, advances in cancer screening and treatment during the past 30 years have resulted in steady increases in the numbers of cancer survivors, with current overall 5-year survival rates >65%. However, 5-year survival rates range from 5.5% for pancreatic cancer to nearly 100% for in situ breast cancers (10). The National Cancer Institute estimates that 11.4 million cancer survivors were alive in the United States as of January 1, 2006 (10). Diet modification and lifestyle interventions have been shown to be effective in decreasing the risk of cancer (11-13), and in improving long-term outcomes for cancer survivors (14-17).

RDs working in oncology practice settings need to develop the appropriate skills, competencies, and knowledge to provide safe and effective nutrition care across the cancer continuum (prevention, treatment, and survivorship). In 2007, the ADA and an expert work group of ON DPG members published the *Oncology Nutrition Evidence Analysis Project*, which systematically summarizes the current literature on oncology nutrition interventions for adults undergoing cancer treatment, and the *Oncology Evidence-Based Nutrition Practice Guideline*, which provides systematically developed statements based on the scientific evidence to assist practitioner and client decisions about appropriate oncology nutrition interventions during cancer treatment. These resources are available to ADA members through the Evidence Analysis Library (www.adaevidencelibrary.com).

The CDR, assisted by members of the ON DPG, established a new board certification credential in oncology nutrition (known as Certified Specialist in Oncology Nutrition [CSO]) in 2008 to recognize documented practice experience and successful completion of an objective examination in the specialty area. An RD who is a CSO has met minimum practice experience requirements and has successfully completed the Board Certification as a Specialist in Oncology Nutrition examination. Eligibility criteria for the credential, applications, and other information are available from CDR (www.cdrnet.org). Indica-

Specialty RD ^a	Advanced Practice RD
<p>A specialty level RD has acquired the proficient specialized knowledge base, complex decision-making skills, and clinical competencies for specialty level practice, the characteristics of which are shaped by the context in which an RD practices.</p> <p>Specialty RDs practice from both <i>expanded</i> and <i>specialized</i> knowledge, skills, competencies, and experience.</p> <p><i>Specialization</i> is concentrating or delimiting one's focus to part of the whole field of dietetics (eg, ambulatory care, long-term care, diabetes, renal, pediatric, oncology, community, nutrition support, research, sports dietetics).</p> <p><i>Expansion</i> 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.</p> <p>Specialty level RDs are either certified or approved to practice in their expanded, specialized areas.</p> <p>Specialization does not always include an additional certification beyond RD certification.</p> <p>Specialty certification may or may not require evidence at Master's level.</p> <p>The Commission on Dietetic Registration (CDR) offers five specialty certifications:</p> <ul style="list-style-type: none"> ● 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) <p>Examples of other specialty certifications currently available to the RD:</p> <ul style="list-style-type: none"> ● Certified Diabetes Educator (CDE) ● Certified Nutrition Support Clinician (CNSC) <p>Educational Preparation (one or more of the following characteristics)</p> <ul style="list-style-type: none"> ● Educational preparation at the specialty level ● May include a formal educational program preparing for specialty practice ● Dietetics practice roles accredited or approved ● May include a formal system of certification and credentialing <p>Nature of Practice</p> <ul style="list-style-type: none"> ● Integrates research, education, practice, and management ● Moderate degree of professional autonomy and independent practice ● Specialized assessment skills, decision-making skills, and diagnostic reasoning skills ● Nonclinical specialty practice (eg, business, communications) may not include all characteristics; however, the complexity of the nature of practice will be comparable. <p>Experience</p> <p>Either require or recommend experience beyond entry level. Experience is required for specialty certification.</p>	<p>An advanced practice level RD has acquired the expert knowledge, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context in which an RD practices.</p> <p>Advanced practice RDs practice from both <i>expanded</i> and <i>specialized</i> knowledge, skills, competencies, and experience.</p> <p><i>Expansion</i> 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.</p> <p>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. Advanced practice RDs are either certified or approved to practice in their expanded, specialized roles.</p> <p>Advanced practice does not always include an additional certification beyond RD certification. Certification may be one way of demonstrating advanced practice competency.</p> <p>Advanced Practice Certification typically implies a Master's degree level.</p> <p>Advanced Practice implies that the individual has the specialization, knowledge, skills, competencies, and experience of Advanced Practice.</p> <p>Specialty Certification is not a prerequisite for Advanced Practice Certification.</p> <p>CDR does not currently offer any Advanced level certifications.</p> <p>Example of an advanced level certification for RDs:</p> <ul style="list-style-type: none"> ● Board Certified in Advanced Diabetes Management (BC-ADM) <p>Educational Preparation (one or more of the following characteristics):</p> <ul style="list-style-type: none"> ● Educational preparation at the advanced level ● 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 <p>Nature of Practice</p> <ul style="list-style-type: none"> ● 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 competencies ● Provision of consultant services to health providers ● Plans, implements, and evaluates programs <p>Experience</p> <p>Documented hours of experience beyond entry level. Experience is required for advanced practice certification.</p>

Figure 4. American Dietetic Association (ADA) definition of terms from the ADA Scope of Dietetics Practice Framework. ^aRD=registered dietitian.

tors described as specialty level of practice designations in this document are not equivalent to the CSO certification. Rather, the CSO designation refers to an RD who has developed oncology nutrition dietetics knowledge, skill, and application beyond the generalist practitioner, and has demonstrated this through suc-

How to Use the Revised Standards of Practice and Standards of Professional Performance for Registered Dietitians (Generalist, Specialty, and Advanced) in Oncology Nutrition Care as part of the Professional Development Portfolio Process^a

1. Reflect	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 Practice and Standards of Professional Performance document 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.
2. Conduct learning needs assessment	Once you have identified your future practice goals, you can review the Standards of Practice and Standards of Professional Performance document to assess your current knowledge, skills, behaviors, and define what continuing professional education is required to achieve the desired level of practice.
3. Develop learning plan	Based on your review of the Standards of Practice and Standards of Professional Performance, you can develop a plan to address your learning needs as they relate to your desired level of practice.
4. Implement learning plan	As you implement your learning plan, keep reviewing the Standards of Practice and Standards of Professional Performance document to re-assess knowledge, skills, and behaviors and your desired level of practice.
5. Evaluate learning plan process	Once you achieve your goals and reach or maintain your desired level of practice, it is important to continue to review the Standards of Practice and Standards of Professional Performance document to re-assess knowledge, skills, and behaviors and your desired level of practice.

Figure 5. Application of the Commission on Dietetic Registration *Professional Development Portfolio* process. ^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.

Successful completion of the specialty certification examination. An RD who has earned the CSO credential is an example of an RD who has demonstrated, at a minimum, specialty level skills as presented in this document.

ADA Revised Standards of Practice and Standards of Professional Performance for RDs (Generalist, Specialty, and Advanced) in Oncology Nutrition Care

An RD may use the ADA Revised SOP and SOPP (Generalist, Specialty, and Advanced) for RDs in Oncology Nutrition Care (see the Web site exclusive Figures 1, 2, and 3 at www.adajournal.org) to:

- identify the competencies needed to provide oncology nutrition care;
- self-assess whether he/she has the appropriate knowledge base and skills to provide safe and effective oncology nutrition care for their level of practice;
- identify the areas in which additional knowledge and skills are needed to practice at the generalist, specialty, or advanced level of oncology nutrition care;
- provide a foundation for public and professional accountability in oncology nutrition care;
- assist management in the planning of oncology nutrition dietetic services and resources;

- enhance professional identity and communicate the nature of oncology nutrition care;
- guide the development of oncology nutrition dietetics-related education and continuing education programs, job descriptions, and career pathways; and
- assist preceptors in teaching students and interns the knowledge, skills, and competencies needed to work in oncology nutrition dietetics and the understanding of the full scope of this profession.

APPLICATIONS TO PRACTICE

The Dreyfus model (18) identifies levels of proficiency (novice, proficiency, or expert) during the acquisition and development of knowledge and skills. This model is helpful in understanding the levels of practice described in the Revised SOP and SOPP for RDs in Oncology Nutrition Care. In ADA SOP and SOPP, the stages are represented as generalist, specialty, and advanced practice levels (see Figure 4).

All RDs, even those with significant experience in other practice areas, begin at the novice level (generalist level) when practicing in a new setting. At the novice level (generalist level), an RD in oncology nutrition care is learning the principles that underpin the practice and is developing skills for effective oncology nutri-

tion care. This RD, who may be an experienced RD or may be new to the profession, has a breadth of knowledge in nutrition overall and may have specialty or advanced knowledge/practice in another area. However, an RD new to the specialty of oncology nutrition may experience a steep learning curve.

At the proficiency stage (specialty level), an RD has developed a deeper understanding of oncology nutrition care and is better equipped to apply evidence-based guidelines and best practices. This RD is also able to modify practice according to unique situations (eg, the ability to anticipate potential treatment-related side effects that may affect nutritional status).

At the expert stage (advanced practice level), an RD thinks critically about oncology nutrition care, demonstrates a more intuitive understanding of oncology nutrition dietetics care and practice, displays a range of highly developed clinical and technical skills, and formulates judgments acquired through a combination of experience and education. Essentially, practice at the advanced level requires the application of composite dietetics knowledge, with practitioners drawing not only on their clinical experience, but also on the experience of oncology nutrition dietetics practitioners in various disciplines and prac-

Role	<i>Use of SOP and SOPP documents by RDs in different practice roles</i>
Clinical practitioner	The hospital employing an RD in general clinical practice has changed the coverage assignment for the RD to include patients in the ambulatory cancer center. The RD reviews available resources regarding nutrition and oncology care, and recognizes a need for specific skills that are not familiar. The RD reviews the SOP and SOPP to evaluate individual skills and competencies for providing care to individuals with cancer, and sets goals to improve competency in oncology nutrition practice.
Manager	A manager who oversees a number of RDs providing nutrition care to individuals with cancer will consider the SOP and SOPP when assembling teams of individuals at various levels of practice. For example, teams may consist of several relatively novice professionals who are supervised by more advanced RDs. The manager also recognizes the SOP and SOPP as important tools for staff to use to assess their own competencies and to use as the basis for identifying personal performance plans.
Individual not currently employed	After several years out of clinical practice, an RD decides to re-establish active practice. The RD plans to start a private practice and would like one of the focus areas to be oncology nutrition care. Prior to accepting referrals, the RD uses the SOP and SOPP as an evaluation tool to determine what knowledge and skills are needed to competently provide quality oncology nutrition care and patient education.
Public health practitioner	An RD working in a state Department of Health is asked to provide nutrition expertise for an educational program aimed at decreasing the cancer incidence and mortality in the state through promotion of healthful lifestyles. The RD uses the SOP and SOPP to evaluate the level of competence needed to provide quality nutrition guidance to this committee. If the expertise level required is determined to be beyond what the RD can competently provide, the RD develops a plan for obtaining additional training and/or guidance from a more experienced RD, if needed.
Researcher	An RD working in a research setting is awarded a grant to demonstrate the impact of oncology nutrition care provided by RDs on treatment outcomes. The RD researcher asks the RDs implementing the study intervention to use the SOP and SOPP to evaluate their current overall level of practice so that the study results can be stratified by RD level of practice (generalist, specialty, advanced).
Dietetics educator	The educator designing continuing education materials for the RD in oncology nutrition develops tools to support implementation of the SOP and SOPP.
Nontraditional health care practitioner	A health plan has Disease Management Certification for its cancer program through the National Committee for Quality Assurance (NCQA). The RD uses the SOP and SOPP as an evaluation tool to demonstrate that the program uses a continuous quality improvement (CQI) approach to continuing competence of the RD providing care.

Figure 6. Case examples of Revised Standards of Practice (SOP) and Standards of Professional Performance (SOPP) for Registered Dietitians (RDs) (Generalist, Specialty, and Advanced) in Oncology Nutrition Care.

tice settings. Experts, with their extensive experience and ability to see the significance and meaning of oncology nutrition care within a contextual whole, are fluid and flexible and, to some degree, autonomous in practice. They not only implement oncology nutrition practice, they also drive and direct clinical practice, conduct and collaborate in research, contribute to multidisciplinary teams, and lead the advancement of oncology nutrition practice.

Indicators for the Revised SOP (Figure 2, available online at www.adajournal.org) and SOPP (Figure 3, available online at www.adajournal.org) for RDs in Oncology Nutrition Care are measurable action statements that illustrate how each standard may be applied in practice. Within the Revised SOP and SOPP

for RDs in Oncology Nutrition Care, an X in the generalist column indicates that an RD who is caring for clients is expected to complete this activity and/or seek assistance to learn how to perform at the level of the standard. The generalist in oncology nutrition care could be an entry level RD or an experienced RD who has newly assumed responsibility to provide oncology nutrition care for clients. An X in the specialty column indicates that an RD who performs at this level has a deeper understanding of oncology nutrition care and has the ability to modify therapy to meet the needs of clients in various situations (eg, the ability to anticipate critical points in the oncology treatment process where nutrition interventions may contribute to positive treatment outcomes). An X in the advanced col-

umn indicates that an RD who performs at this level possesses a comprehensive understanding of oncology nutrition care and a highly developed range of skills and judgments acquired through a combination of experience and education.

Standards and indicators set in boldface type originate from ADA's Revised 2008 SOP in Nutrition Care and SOPP for RDs (2) and should apply to RDs in all three categories. Several indicators not set in boldface type are identified as applicable to all levels of practice. Where Xs are placed in all three categories of practice, it is understood that all RDs in oncology nutrition care are accountable for practice within each of these indicators. However, the depth with which an RD performs each activity will increase as the individual moves be-

Resource	Address	Description
ADA Oncology Nutrition Evidence Analysis Project	www.adaevidencelibrary.com/topic.cfm?cat=1058	The online library of systematic literature reviews on important oncology nutrition practice questions completed in March 2007 (scheduled to be updated on a regular basis).
ADA Oncology Evidence Based Nutrition Practice Guideline	www.adaevidencelibrary.com/topic.cfm?cat=2819&library=EBG	Clinical practice guideline recommendations are systematically developed statements based on scientific evidence to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances. The ADA Oncology Evidence-Based Nutrition Practice Guideline is based on the findings of the Oncology Nutrition Evidence Analysis Project.
ADA Oncology Nutrition Toolkit	(to be released in 2010)	A set of documents for the RD practicing in oncology nutrition that support the application of the Oncology Evidence-Based Nutrition Practice Guideline. The toolkit includes the Medical Nutrition Therapy protocol, documentation forms, client education resources, outcomes monitoring forms, and more.
ADA Evidence Analysis Manual	www.adaevidencelibrary.com/topic.cfm?cat=1155	A manual created by the ADA to describe the step-by-step process of conducting an evidence analysis.
American Cancer Society	www.cancer.org	A nationwide, community-based voluntary health organization that is committed to fighting cancer through balanced programs of research, education, patient service, and advocacy.
Board Certification in Oncology Nutrition (Commission on Dietetic Registration)	www.cdrnet.org/certifications/spec/oncology.htm	The Commission on Dietetic Registration (CDR) grants Board Certification in Oncology Nutrition in recognition of an applicant's documented practice experience and successful completion of an objective examination in the specialty area. Individuals who successfully complete the board certification process are granted the Certified Specialist in Oncology Nutrition (CSO) credential, which provides potential employers, oncology patients and caregivers with a tool to evaluate the expertise of the dietetics professional providing oncology nutrition services.
Cancer Program Standards, Commission on Cancer	www.facs.org/cancer/coc/programstandards.html	Standards for the provision of cancer care by hospitals, treatment centers, and other facilities developed by the Commission on Cancer to ensure quality, multidisciplinary, and comprehensive cancer care delivery.
Cancer Survivorship Care Planning (National Academy of Sciences, Institute of Medicine, 2005)	www.iom.edu/Object.File/Master/30/879/fact%20sheet%20-%20care%20planning.pdf	As part of the 2005 report, "From Cancer Patient to Cancer Survivor: Lost in Transition," an expert panel convened by the National Academy of Sciences, Institute of Medicine recommended that upon discharge from cancer treatment, every patient and their primary health care provider should receive a written follow-up care plan incorporating available evidence-based standards of care. The recommendations state that the care plan should include diet and physical activity recommendations.
Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective	www.dietandcancerreport.org www.wcrf.org www.aicr.org	Systematic review of the literature and recommendations on diet, physical activity, and cancer prevention completed in 2007 by the World Cancer Research Fund and the American Institute for Cancer Research.
National Cancer Institute (NCI)	www.cancer.gov	The official Web site for NCI, an institute of the National Institutes of Health.
NCI Dictionary of Cancer Terms	www.cancer.gov/dictionary	Includes more than 6,000 definitions for cancer related terminology.
NCI Drug Dictionary	www.cancer.gov/drugdictionary	Contains definitions and synonyms for drugs/agents used to treat cancer or cancer-related conditions. Many entries include links to patient information and NCI's Physician Data Query Cancer Clinical Trials Registry.
NCI Cancer Biomedical Informatics Grid (CaBIG)	cabig.nci.nih.gov	The NCI's bioinformatics network designed with the goal of connecting the entire cancer community to leverage resources and facilitate cancer research.
National Comprehensive Cancer Network (NCCN)	www.nccn.org	A not-for-profit alliance of 21 cancer centers dedicated to improving quality and effectiveness of care provided to patients with cancer. Experts from NCCN institutions develop and maintain the NCCN Clinical Practice Guidelines.
National Cancer Database	www.facs.org/cancer/ncdb/index.html	A database collecting cancer outcomes data from more than 1,400 Commission on Cancer approved cancer programs in the United States and Puerto Rico. A joint program of the Commission on Cancer and the American Cancer Society.
Oncology Nutrition Dietetic Practice Group (ON DPG)	www.oncologynutrition.org	The Oncology Nutrition Dietetic Practice Group is a dietetic practice group of the ADA with over 1,600 members. The mission of the DPG is to provide direction and leadership for quality oncology nutrition practice through education and research.
Oncology Nutrition Dietetic Practice Group Electronic Mailing List	www.oncologynutrition.org/member-benefits/electronic-mailing-list	An electronic mailing list for ON DPG members to network and share information related to oncology nutrition.
Surveillance, Epidemiology and End Results (SEER) Program	seer.cancer.gov	A joint program of the NCI and the National Center for Health Statistics of the Centers for Disease Control and Prevention, the SEER program collects information in cancer incidence, survival, and prevalence in the United States.

Figure 7. Oncology nutrition resources mentioned in the American Dietetic Association (ADA) Revised Standards of Practice and Standards of Professional Performance for Registered Dietitians in Oncology Nutrition Care.

yond the generalist level. Level of practice considerations warrant that a holistic view of the Revised SOP and SOPP for RDs in Oncology Nutrition Care be taken. It is the totality of individual practice that defines the level of practice and not any one indicator or standard.

RDs should review the Revised SOP and SOPP for RDs in Oncology Nutrition Care at regular intervals to evaluate individual nutrition knowledge, skill, and competence. Regular self-evaluation is important because it helps identify opportunities to improve and/or enhance practice and professional performance. This self-appraisal also enables oncology nutrition dietitians to better utilize CDR's *Professional Development Portfolio* for self-assessment, planning, improvement, and commitment to lifelong learning (19). These standards may be used in each of the five steps in the *Professional Development Portfolio* process (Figure 5). RDs are encouraged to pursue additional training, regardless of practice setting, to maintain proficiency and stay current, as well as to expand individual scope of practice within the limitations of the legal scope of practice, as defined by state law. Individuals are expected to practice only at the level at which they are competent, and this will vary depending on education, training, and experience (20). See Figure 6 for case examples of how RDs in different roles, at different levels of practice, may use the Revised SOP and SOPP for RDs in Oncology Nutrition Care. Figure 7 provides a listing of oncology nutrition resources mentioned in the Revised SOP and SOPP for RDs in Oncology Nutrition Care.

In some instances, components of the Revised SOP and SOPP for RDs in Oncology Nutrition Care do not specifically differentiate between specialty and advanced level practice. In these areas, it was the consensus of the content experts that the distinctions are subtle, captured in the knowledge, experience, and intuition demonstrated in the context of practice at the advanced level, which combines dimensions of understanding, performance, and value as an integrated whole (21). A wealth of knowledge is embedded in the experience, discernment, and practice of advanced-level RD practitioners. The

knowledge and skills acquired through practice will continually expand and mature. The indicators will be refined as advanced-level RDs systematically record and document their experience using the concept of clinical exemplars. Experienced practitioners observe clinical events, analyze them to make new connections between events and ideas, and produce a synthesized whole. Clinical exemplars provide outstanding models of the actions of individual oncology nutrition dietitians in clinical settings and the professional activities that have enhanced client care. Clinical exemplars include a brief description of the need for action and the process used to change the outcome. Although the use of clinical exemplars may be a new concept for RDs, several examples have been published in the nursing literature (22-24).

FUTURE DIRECTIONS

The Revised SOP and SOPP for RDs in Oncology Nutrition Care are innovative and dynamic documents. Future revisions will reflect changes in practice, dietetics education programs, and outcomes of practice audits. The authors acknowledge that the three practice levels require more clarity and differentiation in content and role delineation, and competency statements that better characterize differences among the practice levels are needed. Creation of this clarity, differentiation, and definition are the challenges of today's oncology nutrition dietitians to better serve tomorrow's practitioners and their clients and customers.

CONCLUSIONS

The Revised SOP and SOPP for RDs in Oncology Nutrition Care are complementary documents and are key resources for RDs at all knowledge and performance levels. These standards can and should be used by RDs in daily practice to consistently improve and appropriately demonstrate competency and value as providers of safe and effective dietetics care. These standards also serve as a professional resource for self-evaluation and professional development for RDs specializing in oncology nutrition care. The development and evaluation pro-

cess is dynamic. Just as a professional's self-evaluation and continuing education process is an ongoing cycle, these standards are also a work-in-progress and will be reviewed and updated every 5 years. Current and future initiatives of ADA will provide information to use in these updates and in further clarifying and documenting the specific roles and responsibilities of RDs at each level of practice. As a quality initiative of ADA and the ON DPG, these standards are an application of continuous quality improvement and represent an important collaborative endeavor.

STATEMENT OF POTENTIAL CONFLICT OF INTEREST: No potential conflict of interest was reported by the authors.

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 any other purpose than that for which they were formulated must be undertaken within the sole authority and discretion of the user.

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Standards of Practice are authoritative statements that describe a competent level of practice demonstrated through nutrition assessment, nutrition diagnosis (problem identification), nutrition intervention (planning, implementation), and outcomes monitoring and evaluation (four separate standards) and the responsibilities for which registered dietitians (RDs) are accountable. The Revised Standards of Practice in Oncology Nutrition Care presuppose that the RD uses critical thinking skills, analytical abilities, theories, best available research findings, current accepted dietetics and medical knowledge, and the systematic holistic approach of the nutrition care process as they relate to the standards. The Revised Standards of Professional Performance in Oncology Nutrition Care 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; utilization and management of resources; quality in practice; and continued competence and professional accountability (six separate standards).

Standards of Practice and Standards of Professional Performance are complementary sets of standards— both serve to completely describe the practice and professional performance of dietetics. All indicators may not be applicable to all RDs' practice or to all practice settings and situations. RDs must be aware of federal and state laws affecting their practice as well as organizational policies and guidelines. The standards are a resource but do not supersede laws, policies, and guidelines.

The term client is used in this evaluation resource as a universal term. Client could also mean patient, customer, participant, consumer, or any individual or group who receives oncology nutrition care. Oncology nutrition services are provided to individuals of all ages. These Standards of Practice and Standards of Professional Performance are not limited to the clinical setting. In addition, it is recognized that the family and caregiver(s) of clients of all ages, including individuals with special health care needs, play critical roles in overall health and are important members of the team throughout the assessment and intervention process. The term "appropriate" is used in the standards to mean: Selecting from a range of best practice or evidence-based possibilities, one or more of which would give an acceptable result in the circumstances.

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 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 Revised 2008 Standards of Practice in Nutrition Care and Standards of Professional Performance have been adapted to reflect three levels of practice (generalist, specialty, and advanced) in oncology nutrition care. In addition, the core indicators have been expanded upon to reflect the unique competence expectations of the RD in oncology nutrition care.

Standards described as specialty level of practice in this document are not equivalent to the Commission on Dietetic Registration certification, Board Certified Specialist in Oncology Nutrition (CSO). Rather, the CSO designation recognizes the skill level of an RD who has developed oncology nutrition knowledge and application beyond the generalist practitioner. An RD with a CSO designation is an example of an RD who has demonstrated, at a minimum, specialty level skills as presented in this document.

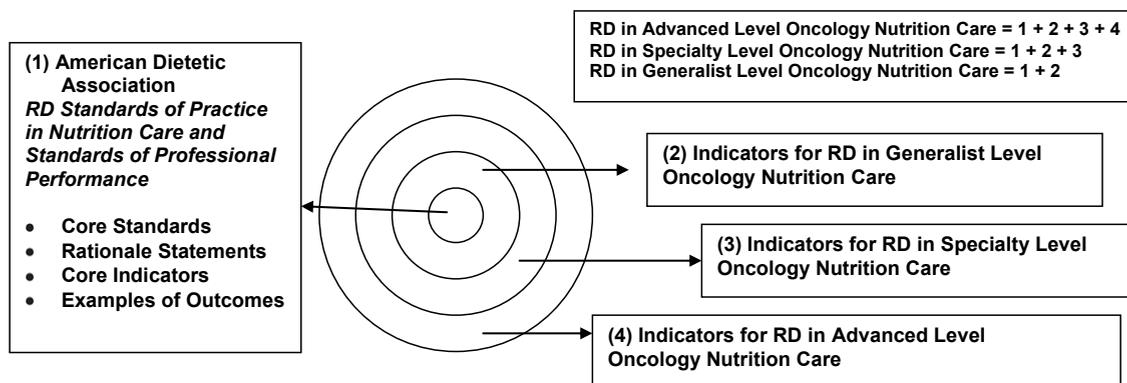


Figure 1. Definition and explanation of Standards of Practice and Standards of Professional Performance for Registered Dietitians (Generalist, Specialty, and Advanced) in Oncology Nutrition Care.

STANDARD 1: NUTRITION ASSESSMENT

Registered dietitians (RDs) use accurate and relevant data and information to identify nutrition-related problems.

Rationale: Nutrition assessment is the first of four steps of the Nutrition Care Process. Nutrition assessment is a systematic process of obtaining, verifying, and interpreting data to make decisions about the nature and cause of nutrition-related problems. It is initiated by referral and/or screening of individuals or groups for nutritional risk factors. Nutrition assessment is an ongoing, dynamic process that involves not only initial data collection, but also reassessment and analysis of client or community needs. It provides the foundation for nutrition diagnosis, the second step of the Nutrition Care Process.

INDICATORS FOR STANDARD 1: NUTRITION ASSESSMENT Bold font indicators are ADA Core RD Standards of Practice Indicators				The "X" signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>				Generalist	Specialty	Advanced
1.1	Evaluates dietary intake for factors that affect health and conditions including nutrition risk			X	X	X
	1.1A	Evaluates adequacy and appropriateness of food, beverage, and nutrient intake (eg, macro- and micronutrients, meal patterns, textures, fluids, and food allergies)		X	X	X
		1.1A1	Considers past, as well as present, intake and practices	X	X	X
		1.1A2	Considers the individual's stage in the cancer continuum and/or comorbid conditions	X	X	X
	1.1B	Evaluates adequacy and appropriateness of current diet prescription		X	X	X
		1.1B1	Considers the individual's stage in the cancer continuum and/or comorbid conditions	X	X	X
1.2	Evaluates health and disease condition(s) for nutrition-related consequences			X	X	X
	1.2A	Evaluates medical and family history and comorbidities		X	X	X
		1.2A1	Assesses primary cancer diagnosis and effect on ingestion, digestion, absorption, and utilization of nutrients	X	X	X
		1.2A2	Evaluates history of treatment-related side effects		X	X
		1.2A3	Evaluates cancer risk factors (eg, family history, smoking history, sun exposure, lifestyle factors, genetics, previous cancer treatment)		X	X
	1.2B	Evaluates physical findings (eg, physical or clinical exam)		X	X	X
		1.2B1	Evaluates anthropometric measurements	X	X	X
		1.2B2	Performs a nutrition-focused physical examination that includes, but is not limited to: assessing for signs and symptoms of the cancer process and/or treatment-related complications (eg, mucositis, lymphedema, cachexia, dysgeusia, and other nutrition impact symptoms)		X	X
	1.2C	Evaluates medication management (not including oncology treatment plan; eg, prescription medications, over-the-counter medications, and dietary supplements, (such as vitamins, minerals and herbal medications); complementary and alternative medicine practices; medication allergies; medication/food interaction; and adherence)		X	X	X
		1.2C1	Evaluates nutrition-related impact of potential changes in medications or medication dose/schedules with the medical team to address symptom management, safety concerns, or appropriateness for the client's stage in the cancer continuum		X	X
		1.2C2	Evaluates food/nutrient/supplement interactions with oncology treatments		X	X

Figure 2. American Dietetic Association Revised Standards of Practice for Registered Dietitians (Generalist, Specialty and Advanced) in Oncology Nutrition Care.

INDICATORS FOR STANDARD 1: NUTRITION ASSESSMENT Bold font indicators are ADA Core RD Standards of Practice Indicators			The “X” signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>			Generalist	Specialty	Advanced
1.2D	Evaluates complications and risks		X	X	X
	1.2D1	Reviews complications during active treatment for nutrition etiology or implications (eg, neutropenia, anemia, inadequate protein intake, inadequate energy intake, hyperglycemia, hyperlipidemia, hypertension, alterations in growth and development)	X	X	X
	1.2D2	Reviews chronic issues and late effects for nutrition etiology or implications (eg, neuropathy, cardiovascular complications, fatigue, anorexia, weight change, alterations in growth and development, alterations in bone health, recurrence of disease, change in activity)		X	X
1.2E	Evaluates diagnostic tests, procedures, evaluations		X	X	X
	1.2E1	Utilizes laboratory data (eg, liver enzymes, white blood counts, tumor markers, inflammatory markers, micronutrient levels, etc) and diagnostic tests (e., swallow evaluations, endoscopy, etc) to evaluate nutritional status	X	X	X
	1.2E2	Evaluates the need for short-term dietary modifications in preparation for diagnostic tests (eg, glucose restriction prior to positron emission tomography [PET] scans, bowel preparation for colonoscopy) and therapeutic procedures (eg, nothing per os [NPO] prior to surgery)	X	X	X
	1.2E3	Determines need for further testing, based on findings, including appropriateness of tests and effects on the individual and the system	X	X	X
	1.2E4	Distinguishes between alterations in nutritional status that may be a result of the cancer process from those due to a nutrient deficiency, and intervenes appropriately to address the underlying issue		X	X
1.2F	Evaluates physical activity, habits, and restrictions		X	X	X
	1.2F1	Compares usual activity level to current age-appropriate physical activity guidelines	X	X	X
	1.2F2	Considers effect of planned treatment on usual activity level, ability to perform activities of daily living (ADLs)	X	X	X
	1.2F3	Assesses adequacy of current level of physical activity to facilitate recovery, prevent disease occurrence, or prevent disease recurrence		X	X
1.2G	Evaluates nutrition-related cancer risk factors on a community level using data from population-based surveys (eg, Behavioral Risk Factor Surveillance System [BRFSS], National Health And Nutrition Examination Survey [NHANES], Surveillance Epidemiology and End Results [SEER], etc)		X	X	X
1.3	Evaluates psychosocial, socioeconomic, functional, and behavioral factors related to food access, selection, preparation, and understanding of health condition (eg, lifestyle implications of infection risk, nutrition benefit coverage)		X	X	X
	1.3A	Uses validated tools to assess developmental, functional and mental status, and cultural, ethnic, and lifestyle assessments (eg, Karnofsky Performance Scale, Pediatric Quality of Life Inventory [PedsQL], ADLs, National Cancer Institute’s Common Toxicity Criteria for Adverse Events)	X	X	X

Figure 2. Continued

INDICATORS FOR STANDARD 1: NUTRITION ASSESSMENT Bold font indicators are ADA Core RD Standards of Practice Indicators		The “X” signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
1.4	Evaluates client(s) knowledge, readiness to learn, and potential for behavior changes	X	X	X
	1.4A Evaluates history of and response to previous treatment interventions and nutrition care services/medical nutrition therapy	X	X	X
	1.4B Evaluates client’s own short-term and long-term goals for dietary intervention	X	X	X
	1.4C Evaluates behavioral mediators (or antecedents) related to dietary intake (ie, attitudes, self-efficacy, knowledge, intentions, readiness and willingness to change, perceived social support, outside influences/caregiver influences on behavior, feelings about living with cancer)	X	X	X
	1.4D Evaluates self-care skills and behaviors	X	X	X
	1.4E Evaluates lifestyle factors for the prevention of cancer	X	X	X
	1.4F Evaluates lifestyle factors for improving outcomes among cancer survivors		X	X
1.5	Evaluates the potential impact of the client’s treatment plan (ie, chemotherapy, radiation, surgery, biologics, hormonal therapies, hematopoietic cell transplantation) on nutritional status	X	X	X
	1.5A Evaluates goal of treatment (curative vs palliative)		X	X
	1.5B Evaluates type, frequency, duration of planned treatment		X	X
1.6	Identifies standards by which data will be compared (eg, national guidelines, research protocols, published research, evidence-based libraries, and databases)	X	X	X
1.7	Identifies possible problem areas for determining nutrition diagnoses	X	X	X
1.8	Documents and communicates:	X	X	X
	1.8A Date and time of assessment	X	X	X
	1.8B Pertinent data (including previous cancer treatment) and comparison with standards	X	X	X
	1.8C Clients’ perceptions, values, and motivation related to presenting problems	X	X	X
	1.8D Changes in client level of understanding, food-related behaviors, and other outcomes for appropriate follow-up	X	X	X
	1.8E Reason for discharge/discontinuation of nutrition services or referral if appropriate	X	X	X

Examples of Outcomes for Standard 1: Nutrition Assessment

- Appropriate assessment tools and procedures (matching the assessment method to the situation) are implemented.
- Assessment tools are applied in valid and reliable ways.
- Appropriate data are collected.
- Data are validated.
- Data are collected, organized, and categorized in a meaningful framework that relates to nutrition problems.
- Effective interviewing methods are used.
- Problems that require consultation with or referral to another provider are recognized.
- Documentation and communication of assessment are complete, relevant, accurate, and timely.

Figure 2. Continued

STANDARD 2: NUTRITION DIAGNOSIS

RDs identify and label specific nutrition problem(s) that the RD is responsible for treating.

Rationale: Nutrition diagnosis is the second of four steps of the Nutrition Care Process. At the end of the nutrition assessment step, data are clustered, analyzed, and synthesized. This will reveal a nutrition diagnosis category from which to formulate a specific nutrition diagnosis statement. There is a difference between a nutrition diagnosis and a medical diagnosis. A nutrition diagnosis changes as the client response changes, whereas a medical diagnosis does not change as long as the disease or condition exists. The main difference between the two types of diagnoses is that the nutrition diagnosis does not make a final conclusion about the identity and cause of the underlying disease. The nutrition diagnosis(es) demonstrates a link to determining goals for outcomes, selecting appropriate interventions, and tracking progress in attaining expected outcomes.

INDICATORS FOR STANDARD 2: NUTRITION DIAGNOSIS Bold font indicators are ADA Core RD Standards of Practice Indicators			The “X” signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>			Generalist	Specialty	Advanced
2.1	Derives the nutrition diagnosis(es) from the assessment data		X	X	X
	2.1A	Identifies and labels the problem	X	X	X
	2.1A1	Differentiates between nutrition-related, cancer-related, and treatment-related side effects		X	X
	2.1B	Determines etiology (cause/contributing risk factors)	X	X	X
	2.1B1	Evaluates multiple factors that impact nutrition diagnosis(es) to identify the major cause(s) likely to respond to medical nutrition therapy		X	X
	2.1C	Clusters signs and symptoms (defining characteristics)	X	X	X
2.2	Ranks (classifies) the nutrition diagnosis(es)		X	X	X
	2.2A	Uses evidence-based protocols and guidelines to prioritize nutrition diagnoses in order of importance or urgency; seeks additional information, input if diagnoses are not typical	X	X	X
	2.2B	Uses experience, in addition to protocols and guidelines, to prioritize nutrition diagnoses in order of importance. Seeks collaborative information from specialty or advance practice level professionals when caring for complex clients (eg, more than 2-3 nutrition diagnoses)		X	X
2.3	Validates the nutrition diagnosis with clients/community, family members, or other health care professionals when possible and appropriate		X	X	X
2.4	Documents the nutrition diagnosis(es) using International Dietetics Nutrition Terminology (IDNT) standardized language and written statement(s) that include problem (p), etiology (e), and signs and symptoms (s)		X	X	X
2.5	Re-evaluates and revises nutrition diagnosis(es) when additional assessment data become available		X	X	X

Examples of Outcomes for Standard 2: Nutrition Diagnosis

- Nutrition diagnostic statements that are
 - Clear and concise
 - Specific—client- or community-centered
 - Accurate—relates to the etiology
 - Based on reliable and accurate assessment data
 - Includes date and time
- Documentation of nutrition diagnosis(es) is relevant, accurate, and timely.
- Documentation of nutrition diagnosis(es) is revised and updated as additional assessment data become available.

Figure 2. Continued

STANDARD 3: NUTRITION INTERVENTION

RDs identify and implement appropriate, purposefully planned actions designed with the intent of changing a nutrition-related behavior, risk factor, environmental condition, or aspect of health status for an individual, target group, or the community at large.

Rationale: Nutrition intervention is the third of four steps in the Nutrition Care Process. It consists of two interrelated components—planning and implementation. Planning involves prioritizing the nutrition diagnoses, conferring with the client and/or others, reviewing practice guides and policies, and setting goals and defining the specific nutrition intervention strategy. Implementation of the nutrition intervention is the action phase that includes carrying out and communicating the plan of care, continuing data collection, and revising the nutrition intervention strategy, as warranted, based on the client response. RDs working with oncology clients should also actively participate in the development of the nutrition recommendations for each client’s Survivorship Care Plan (Institute of Medicine, 2005; www.iom.edu/?id=31512) as the client transitions off of active treatment. An RD performs the interventions or assigns the nutrition care that others provide in accordance with federal, state, and local laws and regulations.

INDICATORS FOR STANDARD 3: NUTRITION INTERVENTION Bold font indicators are ADA Core RD Standards of Practice Indicators		The “X” signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
Plans the Nutrition Intervention				
3.1	Prioritizes the nutrition diagnosis(es) based on problem severity, safety, client needs, likelihood that nutrition intervention will influence problem, and client perception of importance	X	X	X
Prioritization considerations may include:				
3.1A	Intent of treatment (eg, curative, palliative, hospice)	X	X	X
3.1B	Anticipation of acute/active (eg, mucositis, nausea), delayed/late emerging (eg, diarrhea, weight loss) or late effects of treatments (eg, malabsorption due to chronic radiation enteritis, growth failure, osteoporosis)		X	X
3.1C	Co-morbid diseases or conditions in the context of the individual’s current point in the cancer continuum (eg, obesity, cardiovascular disease, congestive heart failure, hypertension, dyslipidemia, osteoporosis)		X	X
3.2	Bases intervention plan on evidence-based guidelines or best available evidence (eg, national guidelines, published research, ADA’s Oncology Evidence Analysis Project and Evidence Based Nutrition Practice Guideline, National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology, and databases)	X	X	X
3.2A	Evaluates and selects appropriate guidelines	X	X	X
3.2B	Recognizes when it is appropriate to depart from established guidelines		X	X
3.3	Refers to policies and program standards (institutional, regional, national, international) to determine the appropriate nutrition intervention	X	X	X
3.4	Confers with client, caregivers, and other health care providers to contribute to overall case management	X	X	X

Figure 2. Continued

INDICATORS FOR STANDARD 3: NUTRITION INTERVENTION Bold font indicators are ADA Core RD Standards of Practice Indicators		The “X” signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
3.5	Determines client-focused goals and expected outcomes	X	X	X
	Defining considerations of the intervention plan may expand but are not limited to include:			
3.5A	Intervention plan to address current issues and educational needs (eg, nausea, vomiting, diarrhea, weight change)	X	X	X
3.5B	Anticipation of acute/active (eg, mucositis, nausea), delayed/late emerging (eg, diarrhea, weight loss) or late effects of treatments (eg, malabsorption due to chronic radiation enteritis, growth failure, osteoporosis)		X	X
3.5C	Plans nutrition interventions with the goal of minimizing treatment-related side effects, treatment delays, and the need for hospital admissions		X	X
3.6	Details the nutrition prescription	X	X	X
3.7	Defines time and frequency of nutrition care	X	X	X
3.8	Utilizes standardized language for describing interventions	X	X	X
3.9	Identifies resources to provide optimal oncology nutrition care (including the ADA Oncology Nutrition Toolkit) and/or makes referrals as needed (eg, swallow evaluation, physical therapy, social work, behavioral therapy)	X	X	X
<i>Implements the Nutrition Intervention</i>				
3.10	Collaborates with colleagues	X	X	X
3.10A	Facilitates and fosters active communication, learning, partnerships, and collaboration with the oncology team and other consulting teams		X	X
3.10B	Identifies and seeks out opportunities for external and interagency collaboration, specific to the individual’s needs			X
3.11	Communicates the plan of care	X	X	X
3.12	Initiates the plan of care	X	X	X
3.12A	Utilizes appropriate behavior change theories (eg, motivational interviewing, behavior modification, modeling) to facilitate oncology nutrition interventions	X	X	X
3.12B	Anticipates potential for complications of the nutrition intervention or cancer treatment plan that would necessitate a change in the nutrition intervention		X	X
3.13	Continues data collection	X	X	X
3.14	Individualizes nutrition intervention	X	X	X
3.14A	Uses interpersonal, teaching, training, coaching, counseling, or technological approaches as appropriate	X	X	X
3.14B	Identifies or anticipates critical points in the oncology treatment process where nutrition interventions may contribute to positive treatment outcomes		X	X
3.14C	Draws on experiential and evidence-based knowledge about the client population to individualize the strategy for complex and dynamic interventions			X

Figure 2. Continued

INDICATORS FOR STANDARD 3: NUTRITION INTERVENTION Bold font indicators are ADA Core RD Standards of Practice Indicators		The "X" signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
3.15	Follows up and verifies that nutrition intervention is occurring	X	X	X
3.16	Adjusts intervention strategies, if needed, as response occurs	X	X	X
3.17	Documents:	X	X	X
3.17A	Date and time	X	X	X
3.17B	Specific treatment goals and expected outcomes	X	X	X
3.17C	Recommended interventions	X	X	X
3.17D	Adjustments to the plan and justification	X	X	X
3.17E	Client/community receptivity	X	X	X
3.17F	Referrals made and resources used	X	X	X
3.17G	Other information relevant to providing care and monitoring progress over time (eg, the Survivorship Care Plan)	X	X	X
3.17H	Plans for follow-up and frequency of care	X	X	X
3.17I	Rationale for discharge from nutrition services if appropriate	X	X	X

Examples of Outcomes for Standard 3: Nutrition Intervention

- Appropriate prioritizing and setting of goals/expected outcomes.
- Appropriate nutrition plan or prescription is developed.
- Interdisciplinary connections are established.
- Nutrition interventions are delivered and actions are carried out.
- Documentation of nutrition intervention is
 - Comprehensive
 - Specific
 - Accurate
 - Relevant
 - Timely
 - Dated and timed
- Documentation of nutrition intervention is revised and updated.

Figure 2. Continued

STANDARD 4: NUTRITION MONITORING AND EVALUATION

RDs monitor and evaluate indicators and outcomes data directly related to the nutrition diagnosis, goals, and intervention strategies to determine the progress made in achieving desired outcomes of nutrition care and whether planned interventions should be continued or revised.

Rationale: Nutrition monitoring and evaluation is the fourth step in the Nutrition Care Process. Through monitoring and evaluation, an RD identifies important measures of change or client outcomes relevant to the nutrition diagnosis and nutrition intervention and describes how best to measure these outcomes. The aim is to promote uniformity within the profession in evaluating the efficacy of nutrition interventions. In addition, an outcomes management system might be implemented.

INDICATORS FOR STANDARD 4: NUTRITION MONITORING AND EVALUATION Bold font indicators are ADA Core RD Standards of Practice Indicators			The “X” signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>			Generalist	Specialty	Advanced
4.1	Monitors progress		X	X	X
	4.1A	Checks client understanding and compliance with nutrition intervention	X	X	X
	4.1B	Determines whether the intervention is being implemented as prescribed	X	X	X
	4.1C	Provides evidence that the nutrition intervention is or is not changing the client behavior or health status	X	X	X
	4.1D	Identifies positive or negative outcomes	X	X	X
	4.1D1	Identifies critical points in the oncology treatment process for monitoring		X	X
	4.1E	Gathers information to indicate progress or reasons for lack of progress	X	X	X
	4.1F	Supports conclusions with evidence (examples listed in indicator 4.2A)	X	X	X
4.2	Measures outcomes		X	X	X
	4.2A	Selects the nutrition care outcome indicator(s) to measure:	X	X	X
	4.2A1	Quality of life (eg, activities of daily living; avoidance of nausea, vomiting, diarrhea, fatigue)	X	X	X
	4.2A2	Physical well-being (eg, appropriate weight trend; fluid and electrolyte balance; maintain optimal bone density; decreasing risk of treatment-related side effects, disease recurrence or secondary malignancy)		X	X
	4.2A3	Impact on short-term treatment outcome (eg, minimize treatment delays or withdrawals; minimize treatment related side effects; minimize need for hospital admissions)		X	X
	4.2A4	Impact on long-term treatment outcomes (eg, relapse, survivorship)		X	X
	4.2A5	Impact on the prevention of new cancers, late effects of treatment, and treatment-related comorbidities		X	X
	4.2B	Uses standardized nutrition care outcome indicator(s)	X	X	X
	4.2C	Uses established, oncology specific outcomes measures (eg, 5-year survival rate, Karnofsky Performance Scores) to relate nutrition outcomes to overall treatment outcomes		X	X

Figure 2. Continued

INDICATORS FOR STANDARD 4: NUTRITION MONITORING AND EVALUATION Bold font indicators are ADA Core RD Standards of Practice Indicators		The “X” signifies the indicators for the level of practice		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
4.3	Evaluates outcomes	X	X	X
	4.3A Compares monitoring data with nutrition prescription/goals or reference standard	X	X	X
	4.3B Evaluates effect of the sum of all interventions on overall client health outcomes	X	X	X
4.4	Modifies intervention as appropriate to address individual client needs (eg, arranges for additional resources or more intensive resources to fulfill the nutrition prescription, tailors tools and methods to ensure desired outcome)	X	X	X
4.5	Documents:	X	X	X
	4.5A Date and time	X	X	X
	4.5B Indicators measured, results, and the method for obtaining measurement	X	X	X
	4.5C Criteria to which the indicator is compared (eg, nutrition prescription/goal or a reference standard)	X	X	X
	4.5D Factors facilitating or hampering progress	X	X	X
	4.5E Other positive or negative outcomes	X	X	X
	4.5F Future plans for nutrition care, nutrition monitoring, and follow-up or discharge	X	X	X

Examples of Outcomes for Standard 4: Nutrition Monitoring and Evaluation	
<ul style="list-style-type: none"> ● The client/community outcome(s) directly relate to the nutrition diagnosis and the goals established in the intervention plan. Examples include but are not limited to: <ul style="list-style-type: none"> ○ Nutrition outcomes (eg, change in knowledge, behavior, food or nutrient intake) ○ Clinical and health status outcomes (eg, change in laboratory values, body weight, blood pressure, risk factors, signs and symptoms, clinical status, infections, and complications) ○ Client-centered outcomes (eg, quality of life, satisfaction, self-efficacy, self-management, and functional ability) ○ Health care utilization and cost-effectiveness outcomes (eg, change in medication, special procedures, planned/unplanned clinic visits, preventable hospital admissions, length of hospitalizations, and prevented or delayed nursing home admissions) ● Documentation of nutrition monitoring and evaluation is: <ul style="list-style-type: none"> ○ Comprehensive ○ Specific ○ Accurate ○ Relevant ○ Timely ○ Dated and timed 	

Figure 2. Continued

STANDARD 1: PROVISION OF SERVICES

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

Rationale: Quality 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		The "X" signifies the indicator for the level of practice.		
Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		Generalist	Specialty	Advanced
<i>Each RD in Oncology Nutrition Care:</i>				
1.1	Provides input and is active in the development of nutrition screening parameters (including guidelines, indicators, and recommendations)	X	X	X
1.1A	Utilizes evidence-based review process to determine oncology specific screening parameters		X	X
1.1B	Evaluates the effectiveness of oncology nutrition screening tools (eg, Patient-Generated Subjective Global Assessment [PG-SGA])		X	X
1.1C	Leads team on changes and process revisions as needed			X
1.2	Audits nutrition screening processes for efficiency and effectiveness	X	X	X
1.2A	Audits oncology nutrition screening process		X	X
1.2B	Analyzes, documents, and reports data from oncology nutrition screening audits			X
1.3	Contributes to and designs referral process and systems to facilitate access to food and nutrition professionals	X	X	X
1.3A	Receives referrals for services from and makes referrals to other nutrition professionals	X	X	X
1.3B	Evaluates the effectiveness of oncology referral tools		X	X
1.3C	Directs and manages referral processes and systems			X
1.4	Collaborates with client to assess needs, background, and resources and to set priorities, establish goals, and create individualized action plans	X	X	X
1.4A	Understands behavior change and counseling theories (eg, health belief model; Social cognitive theory/social learning theory; Stages of change [transtheoretical theory]; Enabling/ Access Enhancing [PRECEDE model]; Fishbein/Ajzen [theory of reasoned action]) and is able to apply theories in practice	X	X	X
1.4B	Evaluates effectiveness in using different theoretical frameworks for interventions with oncology clients		X	X
1.4C	Directs and manages systematic processes to identify, track, and monitor utilization of client resources			X
1.5	Informs and involves clients and their families in decision making	X	X	X
1.6	Recognizes client concepts of illness and their cultural beliefs	X	X	X
1.6A	Adapts practice to meet the needs of an ethnically- and culturally-diverse oncology population	X	X	X
1.6B	Connects clients/families with established resources and services within the specific ethnic/ cultural community		X	X
1.6C	Searches for additional resources to positively influence oncology nutrition outcomes within the client's specific ethnic/cultural community, and collaborates as appropriate			X

Figure 3. American Dietetic Association Revised Standards of Professional Performance for Registered Dietitians (Generalist, Specialty and Advanced) in Oncology Nutrition Care.

INDICATORS FOR STANDARD 1: PROVISION OF SERVICES Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The "X" signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
1.7	Applies knowledge and principles of disease prevention and behavior change appropriate for diverse populations	X	X	X
1.8	Collaborates and coordinates with colleagues	X	X	X
1.8A	Works within the traditional multidisciplinary team for education	X	X	X
1.8B	Reports in partnership with healthcare provider, local health care system and referral sources for treatment care services and education, including Survivorship Care Plan development	X	X	X
1.8C	Serves in consultant role for medical management of cancer and co-morbidities		X	X
1.8D	Plans and develops community-based health promotion/prevention programs based on client needs, culture, evidence-based strategies, and available resources, as applicable		X	X
1.8E	Plans, develops, and facilitates implementation of systems of oncology nutrition care and services			X
1.9	Applies knowledge and skills to determine appropriate action plans	X	X	X
1.9A	Evaluates scientific evidence to apply knowledge and skills to determine the most appropriate action plan		X	X
1.9B	Synthesizes and applies knowledge and skills at the advanced level to determine the most appropriate action plan			X
1.10	Develops policies and procedures that reflect best evidence and applicable laws and regulations	X	X	X
1.10A	Collects and documents nationally standardized and consensus-based oncology performance measures	X	X	X
1.10B	Participates as a committee member in the development and updating of policies and procedures and evidence-based practice tools in their work site	X	X	X
1.10C	Develops implementation strategies for quality improvement tailored to the needs of the organizations and his/her client populations (eg, identification/adaptation of evidence-based practice guidelines/protocols, skills training/reinforcement, organizational incentives and supports)		X	X
1.10D	Develops and manages oncology education programs in compliance with national guidelines and standards (eg, ADA's Oncology Evidence-Based Nutrition Practice Guideline, National Comprehensive Cancer Network [NCCN] Clinical Practice Guidelines in Oncology, World Cancer Research Fund/American Institute for Cancer Research: Food, Nutrition, Physical Activity, and the Prevention of Cancer report and recommendations for cancer prevention)		X	X
1.10E	Develops oncology specific community/prevention programs incorporating behavior change theory, self-concept, lifestyle functions, and systematic evaluation of learning		X	X
1.10F	Leads process of developing, monitoring, and evaluating the use of protocols/guidelines/practice tools; plans and manages changes			X

Figure 3. Continued

INDICATORS FOR STANDARD 1: PROVISION OF SERVICES Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The "X" signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
1.11	Advocates for the provision of food and nutrition services as part of public policy for cancer prevention and cancer care services	X	X	X
1.11A	Participates in the process of client cancer advocacy activities (eg, community cancer screenings, local American Cancer Society events)	X	X	X
1.11B	Assesses client population for situations where cancer advocacy is needed		X	X
1.11C	Advocates for cancer prevention and cancer care services at the local, state, and federal policy level; promotes healthy public policy by participating in legislative and policy-making activities that influence provision of cancer care services		X	X
1.11D	Takes leadership role in cancer advocacy activities/issues; authors articles and delivers presentations on topic; networks with other cancer advocacy interested parties			X
1.12	Maintains records of services provided	X	X	X
1.13	Develops nutrition protocols and policies for target populations	X	X	X
1.13A	Utilizes evidence-based guidelines, best practices, and national and international guidelines in the delivery of oncology nutrition services	X	X	X
1.13B	Develops oncology nutrition programs, protocols, and policies based on evidence-based guidelines, best practices, trends, and national and international guidelines		X	X
1.13C	Leads in the development of oncology nutrition programs, protocols, and policies based on evidence-based guidelines, best practices, trends, and national and international guidelines			X
1.14	Implements food/formulary delivery systems in terms of the nutrition status, health, and well-being of target populations	X	X	X
1.14A	Collects data and offers feedback on current food/formula delivery systems	X	X	X
1.14B	Collaborates in the design, evaluation, and/or revision of food/formulary delivery systems for specific oncology populations		X	X
1.14C	Initiates the design, evaluation, and/or revision of food/formulary delivery systems for specific oncology populations			X

<p>Examples of Outcomes for Standard 1: Provision of Services</p> <ul style="list-style-type: none"> ● Clients participate in establishing goals. ● Clients' needs are met. ● Clients are satisfied with services and products. ● Evaluations reflect expected outcomes. ● Effective screening and referral services are established. ● Clients have access to food assistance. ● Clients have access to nutrition services.
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Figure 3. Continued

STANDARD 2: APPLICATION OF RESEARCH

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

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

INDICATORS FOR STANDARD 2: APPLICATION OF RESEARCH Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
2.1	Accesses and reviews best available research findings for application to dietetics practice	X	X	X
2.1A	Understands research design and methodology	X	X	X
2.1B	Encourages the use of evidence-based tools as a basis for stimulating awareness and integration of current evidence, especially the ADA Oncology Evidence-Based Nutrition Practice Guideline	X	X	X
2.1C	Understands study outcomes and how to interpret and apply the results to oncology clinical practice		X	X
2.1D	Identifies key clinical and management questions and utilizes systematic methods to extract evidence-based research to answer questions (suggested resource: ADA’s Evidence Analysis Manual)		X	X
2.2	Bases practice on significant scientific principles and evidence-based guidelines or best available evidence	X	X	X
2.2A	Systematically reviews the available scientific literature in situations where evidence-based practice guidelines for oncology nutrition do not exist		X	X
2.2B	Leads in the development of evidence-based guidelines for use in oncology clinical practice			X
2.3	Integrates best evidence with clinical and managerial expertise and client values	X	X	X
2.4	Promotes research through alliances and collaboration with food and nutrition and other professionals and organizations	X	X	X
2.4A	Facilitates or participates in studies related to nutrition in oncology nutrition care practice		X	X
2.4B	Designs and leads studies related to nutrition in oncology care practice			X

Figure 3. Continued

INDICATORS FOR STANDARD 2: APPLICATION OF RESEARCH Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
2.5	Contributes to the development of new knowledge and research in dietetics	X	X	X
2.5A	Participates in practice-based research networks		X	X
2.5B	Identifies and initiates research relevant to oncology practice as the primary investigator or as a collaborator with other members of the health care team or community			X
2.6	Collects measurable data and documents outcomes within practice setting	X	X	X
2.6A	Develops and utilizes systematic processes to collect and analyze the data		X	X
2.6B	Monitors and evaluates pooled/aggregate data against expected outcomes		X	X
2.6C	Utilizes collected data as part of a quality improvement process to improve outcomes and quality of care			X
2.7	Communicates research data and activities through publications and presentations	X	X	X
2.7A	Presents information on evidence-based oncology research at the local level (eg, community groups, colleagues)	X	X	X
2.7B	Presents at local, regional, and national meetings and authors oncology-related publications		X	X
2.7C	Serves in a leadership role for oncology-related publications and program planning of national meetings		X	X
2.7D	Translates research findings in the development of policies, procedures, and guidelines for oncology nutrition care			X

Examples of Outcomes for Standard 2: Application of Research

- Client receives appropriate services based on the effective application of evidence-based guidelines or best available evidence.
- Evidence-based guidelines or best available evidence is used for the development and revision of resources used in practice.
- Benchmarking and knowledge of best practices is used to evaluate and improve performance.

Figure 3. 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 Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
3.1	Exhibits knowledge of food and nutrition related to the spectrum of oncology nutrition care	X	X	X
	3.1A Interprets current oncology nutrition research and applies to professional practice, as appropriate		X	X
	3.1B Participates in oncology nutrition research, and applies the findings to professional practice, as appropriate		X	X
	3.1C Acts as an expert reference for other health care providers, the community, and outside agencies, related to oncology nutrition			X
3.2	Communicates and applies scientific principles, research, and theory	X	X	X
3.3	Selects appropriate information for communication and application	X	X	X
3.4	Integrates knowledge of food and human nutrition with knowledge of health, social sciences, communication, and management	X	X	X
	3.4A Integrates new knowledge of oncology nutrition therapy as it applies to the client population	X	X	X
	3.4B Integrates knowledge of oncology nutrition therapy in new and varied contexts		X	X
	3.4C Applies new knowledge of oncology nutrition therapy in varied context with clients/families, colleagues, and the public			X
3.5	Shares knowledge and information with clients, colleagues, and the public	X	X	X
	3.5A Selects best method or format for presenting in writing or verbally when communicating information	X	X	X
	3.5B Interprets information and research related to conventional and complementary oncology nutrition for clients, colleagues, and the public	X	X	X
	3.5C Develops oncology nutrition articles for consumers and other health care providers		X	X
	3.5D Participates as invited reviewer, author, or presenter at local and regional meetings and media outlets		X	X
	3.5E Participates in leadership role for publications (ie, editor, editorial advisory board) and on program planning committees		X	X
	3.5F Participates as invited reviewer, author, or presenter at national, international meetings and media outlets			X
	3.5G Serves as national and international oncology nutrition media spokesperson			X
	3.5H Functions as an evidence-based oncology nutrition opinion leader			X
3.6	Guides students and interns in the application of knowledge and skills	X	X	X
	3.6A Participates as an educator, mentor, or preceptor to students, interns or health care providers within or outside of profession		X	X
	3.6B Develops educational and/or mentorship programs that promote nutrition in oncology care and education			X

Figure 3. Continued

INDICATORS FOR STANDARD 3: COMMUNICATION AND APPLICATION OF KNOWLEDGE Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
3.7	Seeks current and relevant information related to practice	X	X	X
3.7A	Applies current research to protocol and guideline development		X	X
3.7B	Interprets the strengths and weaknesses of research findings from a single study in light of the more comprehensive research base on a given topic		X	X
3.8	Contributes to the development of new knowledge	X	X	X
3.8A	Initiates and/or serves on planning committees/task forces to develop continuing education programs	X	X	X
3.8B	Serves as consultant to business, industry, and national oncology organizations regarding continuing education needs of consumers and health care providers		X	X
3.8C	Establishes collaborative practice with other health care providers at a systems level (eg, a disease management program)		X	X
3.8D	Uses clinical exemplars to generate new knowledge and develop new guidelines, programs, and policies in the advanced oncology practice area			X
3.8E	Negotiates and/or establishes privileges at systems level for new advances in practice			X
3.9	Uses information technology to communicate, manage knowledge, and support decision making	X	X	X
3.9A	Participates in, utilizes, and/or leads electronic professional networking groups to stay current in oncology nutrition practice (eg, ADA’s Oncology Nutrition Dietetic Practice Group listserv)	X	X	X
3.9B	Utilizes (and participates in the development/revision of) electronic health records within the work site	X	X	X
3.9C	Identifies and/or develops Web-based oncology nutrition education tools		X	X
3.9D	Identifies pertinent nutrition-related clinical trial information (eg, National Cancer Institute [NCI] resources)		X	X
3.9E	Contributes nutrition-related expertise to national cancer-related bioinformatics projects as needed (eg, NCI’s Cancer Bioinformatics Grid [CaBIG] project).			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	X	X	X
3.11	Establishes credibility as a resource within the multidisciplinary health care and management team	X	X	X
3.11A	Educates members of interdisciplinary teams regarding the specialized knowledge and skills of the oncology dietitian and the Board Certified Specialist in Oncology Nutrition (CSO)		X	X
3.11B	Identified as an expert/resource of scientific information in oncology nutrition and/or related field by colleagues and/or medical community			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

Figure 3. 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 Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
4.1	Uses a systematic approach to maintain and manage resources	X	X	X
4.2	Manages resources in the provision of dietetic services	X	X	X
4.2A	Participates in operational planning of oncology nutrition programs (ie, staffing, marketing, budgeting, billing, program planning)	X	X	X
4.2B	Coordinates effective delivery of oncology nutrition programs; understands revenue stream and insurance reimbursement trends		X	X
4.2C	Designs and evaluates marketing strategies for RD services; collects and utilizes benchmarking data for staffing resources		X	X
4.2D	Leads in business and strategic planning at the institutional/oncology program level			X
4.3	Evaluates safety, effectiveness, and value while planning and delivering services and products	X	X	X
4.3A	Understands and complies with the rules and regulations of The Joint Commission standards (www.jointcommission.org), the Commission on Cancer’s Cancer Program Standards (www.facs.org/cancer/coc/programstandards.html), and those of other accreditation bodies	X	X	X
4.3B	Participates in the evaluation and selection of new products and equipment to assure safe, optimal, and cost-effective delivery of oncology nutrition therapy at the systems level		X	X
4.3C	Advocates for staffing that supports the client population and census level		X	X
4.3D	Designs, promotes, and seeks executive commitment to new services that will meet corporate or institutional goals for oncology services		X	X
4.3E	Analyzes safety, effectiveness, cost in planning and delivering services and products at the systems level			X
4.3F	Leads development of appropriate products and services to meet unmet needs			X

Figure 3. Continued

INDICATORS FOR STANDARD 4: UTILIZATION AND MANAGEMENT OF RESOURCES Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
4.4	Participates in performance improvement and documents outcomes relative to resource management	X	X	X
4.4A	Proactively recognizes needs, anticipates outcomes and consequences of different approaches, and makes necessary modifications to plans to achieve desired client related and departmental resource allocation outcomes		X	X
4.4B	Uses appropriate data collection tools to collect, document, analyze, and share (with appropriate institutional approval) outcomes data (eg, outcome data collection tools available in the ADA Oncology Nutrition Toolkit)		X	X
4.4C	Publishes outcomes data (with appropriate institutional approval) in the scientific literature		X	X
4.4D	Leads long-term thinking and planning, anticipates needs, fully understands strategic plans, and integrates justification into plans			X
4.5	Assists individuals and groups to identify and secure appropriate and available resources and services	X	X	X
4.5A	Identifies, directs, and guides consumers to appropriate oncology nutrition information	X	X	X
4.5B	Facilitates collaborations with community groups to disseminate oncology nutrition information		X	X
4.5C	Establishes administratively sound programs (eg, cancer prevention, oncology education, survivorship program, and Medical Nutrition Therapy [MNT] 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.

Figure 3. Continued

STANDARD 5: QUALITY IN PRACTICE

RDs systematically evaluate the quality of services and improve practice based on evaluation results.

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

INDICATORS FOR STANDARD 5: QUALITY IN PRACTICE Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
5.1	Knows, understands, and complies with federal, state, and local laws and regulations	X	X	X
5.1A	Complies with local Department of Health and Health Insurance Portability and Accountability Act of 1996 (HIPAA) regulations and standards	X	X	X
5.1B	Interacts with policy makers and insurers to contribute and influence oncology nutrition issues	X	X	X
5.1C	Works to introduce policy/law to facilitate oncology nutrition care across the cancer continuum (from prevention to survivorship)		X	X
5.1D	Acts as an expert to law and policy makers and insurers for oncology nutrition issues			X
5.2	Understands pertinent national quality and safety initiatives (eg, The Institute of Medicine, The National Quality Forum, The Institute for Healthcare Improvement, Centers for Medicare and Medicaid Services Quality Indicators, Commission on Cancer, National Comprehensive Cancer Network)	X	X	X
5.2A	Participates in hospital/agency/institution quality monitoring endeavors and advocates for oncology nutrition services		X	X
5.2B	Anticipates changes to local, state, and national quality initiatives, and leads efforts to support oncology nutrition and related services			X
5.3	Implements an Outcomes Management System to evaluate the effectiveness and efficiency of practice	X	X	X
5.3A	Selects criteria for data collection as part of a quality improvement process	X	X	X
5.3B	Advocates for and participates in the development of clinical, operational, and financial data collection tools upon which oncology nutrition care outcomes can be derived, reported, and used for improvement		X	X
5.3C	Serves in leadership role to evaluate benchmarks of cancer and nutrition-related program indicators to national, state, and local public health and population-based indicators (eg, Healthy People 2010/2020 Leading Health Indicators, Health Effectiveness Data and Information Set [HEDIS], and national oncology quality improvement measure sets) to positively impact program planning and development			X
5.4	Understands and continuously measures quality of dietetic services in terms of process and outcomes	X	X	X
5.4A	Evaluates and ensures safe nutrition care delivery	X	X	X
5.4B	Evaluates the provision of oncology nutrition services, including client load, reimbursement data, and customer satisfaction survey results		X	X

Figure 3. Continued

INDICATORS FOR STANDARD 5: QUALITY IN PRACTICE Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
5.5	Identifies performance improvement criteria to monitor effectiveness of oncology services	X	X	X
5.5A	Participates in multidisciplinary efforts to improve oncology care outcomes		X	X
5.5B	Leads multidisciplinary efforts to establish and improve oncology nutrition care interventions and outcomes			X
5.6	Designs and tests interventions to improve oncology nutrition processes and services	X	X	X
5.6A	Develops systems to monitor problematic product names and error prevention recommendations provided by Institute for Safe Medication Practices (www.ismp.org), US Food and Drug Administration (www.fda.gov), and United States Pharmacopeia (www.usp.org)	X	X	X
5.6B	Contributes to awareness of potential drug-nutrient and drug-supplement interactions and potential interactions between scheduled treatments and complementary/alternative therapies (eg, grapefruit and paclitaxel [Taxol, Bristol-Myers Squibb Oncology, New York, NY], green tea and bortezomib [Velcade, Millenium Pharmaceuticals, Inc, Cambridge, MA])	X	X	X
5.6C	Develops systems to alert oncology clients and care providers to potential hazards (eg, foodborne illness outbreaks)		X	X
5.7	Identifies and addresses errors and hazards in dietetic services	X	X	X
5.8	Identifies expected outcomes	X	X	X
5.9	Documents outcomes	X	X	X
5.10	Compares actual performance to expected outcomes using data from multiple sources	X	X	X
5.10A	Compares individual performance to self-directed goals and expected outcomes	X	X	X
5.10B	Compares departmental/organizational performance to goals and expected outcomes		X	X
5.10C	Benchmarks departmental /organizational performance with national programs and standards			X
5.11	Documents actions taken when discrepancies exist between actual performance and expected outcomes	X	X	X
5.11A	Develops report of individual and departmental/organizational outcomes and improvement recommendations and disseminates findings		X	X
5.12	Continuously evaluates and refines services based on measured outcomes	X	X	X
5.12A	Utilizes a continuous quality improvement approach to measure performance against desired outcomes using data from multiple sources	X	X	X
5.12B	Adjusts services based on most current evidence-based information	X	X	X

Examples of Outcomes for Standard 5: Quality in Practice

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

Figure 3. 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 Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The “X” signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
6.1	Conducts self-assessment of strengths and weakness at regular intervals	X	X	X
6.2	Identifies needs for development from a variety of sources (eg, feedback from peers, feedback from other health care professionals, feedback from clients, comparison to Standards of Practice [SOP]/Standards of Professional Performance [SOPP] indicators, and/or the Oncology Nutrition Content Outline/Test Specifications provided with the CSO exam review materials)	X	X	X
6.3	Participates in peer review	X	X	X
6.3A	Participates in peer evaluation, including but not limited to peer supervision, clinical chart review, professional practice, and performance evaluations, as applicable	X	X	X
6.3B	Participates in scholarly review including but not limited to oncology professional articles, chapters, books	X	X	X
6.3C	Serves as reviewer or editorial board associate for oncology professional organizations, journals, and books		X	X
6.3D	Leads an editorial board for scholarly review including but not limited to oncology professional articles, chapters, books			X
6.4	Mentors others	X	X	X
6.4A	Participates in mentoring entry level oncology nutrition professionals	X	X	X
6.4B	Develops mentoring or internship opportunities for dietetics professionals and mentoring opportunities for oncology and health care professionals		X	X
6.5	Develops and implements a plan for professional growth	X	X	X
6.5A	Actively pursues oncology continuing education opportunities locally, regionally, and nationally	X	X	X
6.5B	Develops and implements a plan for achieving the task and knowledge base needed to obtain/maintain Board Certification as a Specialist in Oncology Nutrition (CSO) offered by the Commission on Dietetic Registration	X	X	X
6.5C	Develops and implements a plan for achieving and maintaining specialty practice for the majority of SOP/SOPP indicators	X	X	
6.5D	Develops and implements a plan for achieving and maintaining advanced practice for the majority of SOP/SOPP indicators		X	X
6.6	Documents development activities tailored to oncology nutrition practice (eg, documents examples of expanded professional responsibility in oncology nutrition care in professional portfolio, documents oncology nutrition accomplishments in a curriculum vitae, and publishes in the oncology literature)	X	X	X

Figure 3. Continued

INDICATORS FOR STANDARD 6: COMPETENCE AND ACCOUNTABILITY Bold font indicators are ADA Core RD Standards of Professional Performance Indicators		The "X" signifies the indicator for the level of practice.		
<i>Each RD in Oncology Nutrition Care:</i>		Generalist	Specialty	Advanced
6.7	Adheres to the ADA Code of Ethics	X	X	X
6.8	Assumes responsibility for actions and behaviors	X	X	X
	6.8A Fosters excellence and exhibits professionalism in oncology nutrition practice (eg, manages change effectively; demonstrates assertiveness, listening, and conflict resolution skills; demonstrates ability to build coalitions)	X	X	X
	6.8B Leads by example; exemplifies professional integrity as a leader of oncology nutrition		X	X
	6.8C Directs and develops policies that ensure accountability as applicable to a management role			X
6.9	Integrates the ADA Standards of Practice and Standards of Professional Performance into self-assessment and development plans	X	X	X
	6.9A Uses SOP/SOPP as practice guide for professional role	X	X	X
	6.9B Crafts corporate/institutional policy, guidelines, human resource material (eg, career ladders, acceptable performance level) using ADA SOP/SOPP as guides		X	X
	6.9C Develops and defines approach to practice in the field of oncology nutrition, and contributes to revisions of the SOP and SOPP in Oncology Nutrition Care as practice evolves			X
6.10	Applies research findings and best available evidence into practice	X	X	X
	6.10A Accesses and utilizes/monitors major oncology care and education publications	X	X	X
	6.10B Serves as an author of oncology related publications and oncology presenter for consumer and health care provider audiences on oncology topics		X	X
	6.10C Develops skill in accessing and critically analyzing research		X	X
	6.10D Mentors others in developing skills in accessing and critically analyzing research			X
6.11	Obtains occupational certifications in accordance with federal, state, and local laws and regulations	X	X	X
6.12	Seeks leadership opportunities	X	X	X
	6.12A Utilizes habits of good interfacing (communication, information gathering, and practices) to lead in this area	X	X	X
	6.12B Serves on local oncology planning committees/task forces for health professionals and industry	X	X	X
	6.12C Serves on regional and national oncology planning committee task forces for health professionals and industry		X	X
	6.12D Proactively seeks opportunities at the local, regional, and national and international level to demonstrate the integration of their practices and programs with larger system (ie, American Cancer Society, oncology specific professional groups [eg, American Society for Clinical Oncology (ASCO), Oncology Nursing Society (ONS)], Commission on Cancer)			X

Examples of Outcomes for Standard 6: Competence and Accountability

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

Figure 3. Continued