



Communication Skills

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Expanding Scope of Nutrition Practice

OBJECTIVES

- Describe the Scope of Practice Framework.
- Explore evolving areas of practice in nutrition.
- Describe the four parts of the Nutrition Care Process.

"Value everyone's contribution and treat everyone with respect."

-Michelle Obama

Introduction

Effective communication skills have been recognized as essential for successful nutrition and dietetics practice. The basic communication techniques of counseling, education, and knowledge are part of the scope of practice outlined in the Academy of Nutrition and Dietetics credentials of Registered Dietitian Nutritionist (RDN) and Nutrition and Dietetic Technician, Registered (NDTR).¹⁻⁴ The Academy of Nutrition Code of Ethics further defines the Scope of Practice.⁵

Similar communication and counseling skills are required by the global community of nutrition professionals as well. The International Confederation of Dietetic Associations (ICDA) represents more than 40 international dietetics organizations comprising more than 160,000 members worldwide. ICDA is a global advocate for the profession and is the largest worldwide body of nutrition dietetics beyond national borders. The ICDA's definition of "a dietitian is a person with a qualification in nutrition and dietetics, recognized by national authority(s). The dietitian applies the science of nutrition to the feeding and education

of individuals or groups in health and disease."⁶ Specific educational competencies vary among member groups, but counseling and education knowledge and skills are a universal requirement. Practitioners may be called dietitians or nutritionists and may have country/area-specific licensure requirements.⁷ In a ICDA 2016 survey, 33 of 42 countries (79%) had some form of professional registered title with only Denmark and Sweden specific to clinical practice. Some of the dietetic associations that are members of the ICDA include The Academy of Nutrition and Dietetics, The Australian Association of Dietitians, Dietitians of Canada, Irish Nutrition and Dietetic Institute, and Nutritionist-Dietitians' Association of the Philippines.⁶

Over the last decade, nutrition professionals have expanded their practice to include hospitals, academic health science centers, long-term care facilities, corporate wellness programs, interdisciplinary practice in areas such as sports nutrition or weight loss, public health agencies, private practice, or corporate management. Most practitioners are responsible for assessing nutritional status, selecting diagnoses,

intervening through counseling, and evaluating what clients and patients are doing successfully and what they may need to change. The goal is to help people improve their eating behaviors so that their health will improve and reduce the risk of chronic diseases. Health behavior change can reduce the risk of preventable diseases and improve the health of those with medical issues.

This chapter discusses the expanding scope of practice in nutrition. The Academy of Nutrition and Dietetics' Scope of Practice framework forms the parameters of competent practice. New areas of evolving practice are explored. The Nutrition Care Process (NCP) model uses the Nutrition Care Process Terminology (NCPT) to drive the cycle of nutrition care.

Who Provides Nutrition Counseling and Education?

In the United States, credentialed nutrition and dietetics practitioners (RDNs and NDTRs) can provide nutrition counseling and education as well as other skills within their specific areas of expertise and standards of practice and performance.^{1,2} Those who are credentialed as RDNs or NDTRs have successfully completed an accredited training program, passed a qualifying examination, and are required to maintain continuing education in their specific areas of practice.^{8,9} Many states also require licensure for RDNs, which may have additional requirements. In contrast to the requirements mandated for RDNs and NDTRs, the term “nutritionist” is not a federally regulated title and thus there are no concrete educational or credentialing standards or regulations in place for nutritionists in the United States. In some states, there may be statutory regulations around the use of the nutritionist title. RDNs and NDTRs practice according to the Academy of Nutrition and Dietetics' Scope of Practice Framework as well as their respective Standards of Practice (SOP) and Standards of Professional Performance (SOPP).^{1,2}

The Scope of Practice Framework

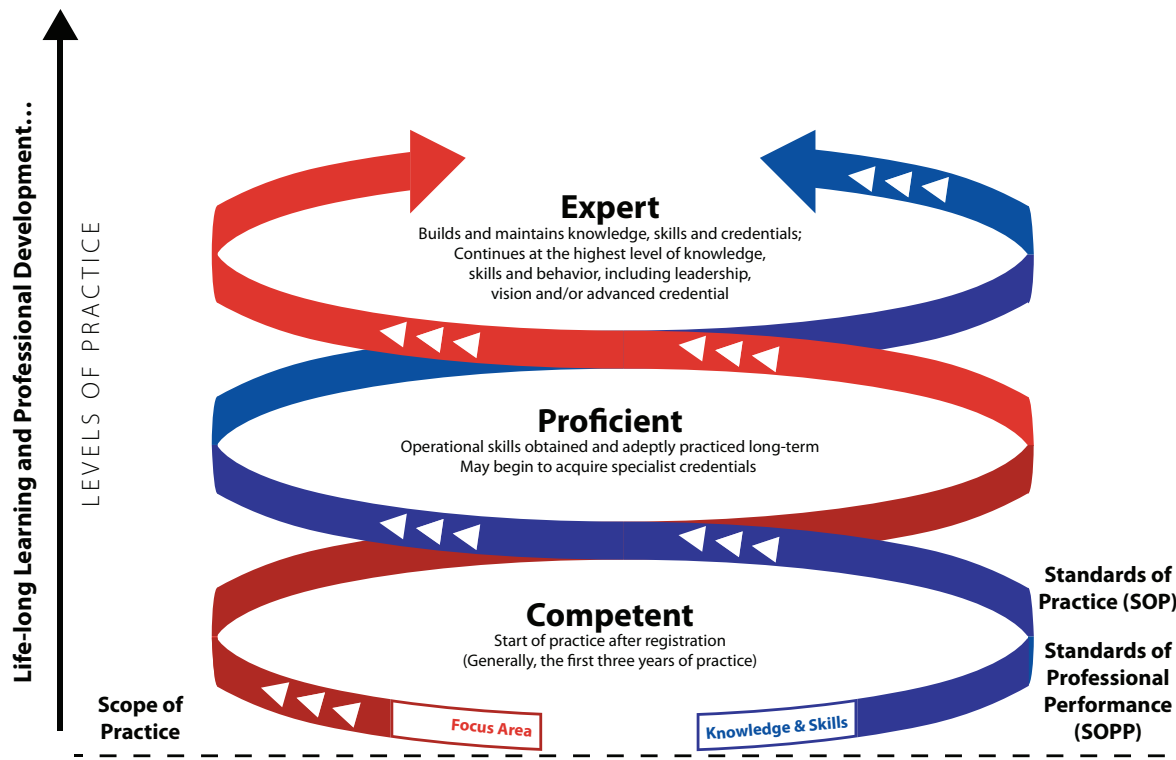
The Scope of Practice framework from the Academy of Nutrition and Dietetics provides guidance on the practitioner's skill set or scope of practice requirements.^{1,2} For RDNs and NDTRs, it delineates core

responsibilities at the entry level of practice based on formal education, knowledge, skills, and training set by the Accreditation Council of Education in Nutrition and Dietetics (ACEND).⁸ Nutrition professionals each have their own unique career paths and experiences, and, therefore, have their own individualized scopes of practice. Many nutrition specialties have unique SOP and SOPP expertise for competent, proficient, and expert levels that are updated regularly and are often in conjunction with affiliated practice organizations.¹⁰ A person's individual scope of practice has six main elements: the Academy of Nutrition and Dietetics' scope of practice, accreditation organizations, federal and state regulations and interpretive guidelines, organizational policies and procedures, education and credentials, and additional individual training/credentials/certifications.

The Academy of Nutrition and Dietetics Scope of Practice

The Academy's scope of practice for RDNs and NDTRs (**Figure 1-1**) is built on the foundation of an ACEND-accredited education as well as professional credentialing regulated by the Commission on Dietetic Registration (CDR).^{1,2,8,9} There are three main components to the Academy's scope of practice. The “foundational” component includes a series of documents that outline various policies, standards, and regulations related to the roles and functions of RDNs and NDTRs.^{1,2} The “resources” component emphasizes important evidence-based practice resources.¹¹⁻¹³ The “management and advancement” section includes information and tools for career advancement and skill development in nutrition and dietetics.^{14,15}

As part of the scope of practice, the Academy develops standards for evaluating the quality of practice and performance of RDNs and NDTRs. The tools of SOPs and SOPPs are used by professionals for self-evaluation and to determine the education and skills necessary to advance from a generalist to a specialist and advanced levels of dietetics practice. The SOPs are based on the four steps in the Nutrition Care Process (NCP): nutrition assessment, nutrition diagnosis, nutrition intervention, and nutrition monitoring and evaluation and are related to patient care.¹¹ The NCP is described in detail in a later section of this chapter. The SOPPs contain six dimensions of professional performance, including the following: provision of services, application of research, communication and application of knowledge, utilization and management of resources, quality in practice, and competency and accountability.¹⁻²



Adapted from the *Dietetics Career Development Guide*. For more information, please visit <https://www.eatrightpro.org/practice/career-development/career-toolbox/dietetics-career-development-guide>.

Figure 1-1 Nutrition and dietetics practice components for registered dietitian nutritionists (RDNs) and nutrition and dietetics technicians, registered (NDTRs).

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Accreditation Organizations

Depending on the environments and roles in which nutrition professionals are working, their scope of practice may also be influenced by various other accreditation organizations. For example, RDNs and NDTRs working in hospitals may need to comply with the standards and elements of performance determined by The Joint Commission and those working in accredited medical rehabilitation, or behavioral health centers may need to observe guidelines established by the Commission on Accreditation of Rehabilitation Facilities (CARF International). These types of standards often provide guidance on the manner in which nutrition professionals should counsel, educate, and communicate with patients, clients, and other health-care professionals.

Federal and State Regulations and Interpretive Guidelines

Nutrition professionals may also need to practice in accordance with federal and state mandated regulations and the associated interpretive guidelines.

For example, the Centers for Medicare and Medicaid Services (CMS) requires healthcare organizations to operate within certain Conditions of Participation and Conditions for Coverage in order to participate in CMS programs. Some of these regulations focus on patient confidentiality, safety, documentation, and quality of care.

Organizational Policies and Procedures

Depending on the organization a nutrition professional works for, there may be policies and procedures that impact their scope of practice. This may include various bylaws as well as other rules related to clinical privileging and other aspects of patient or client care.

Education and Credentials

Educational and supervised practice requirements for those working toward a career as an RDN or NDTR are regulated by ACEND and the review and approval of accreditation to nutrition and dietetics programs is performed by ACEND.⁸ The qualifying examination

for RDNs and NDTRS as well as the continuing education necessary to maintain professional registration is regulated by the CDR.⁹

Additional Individual Training/ Credentials/Certifications

In addition to obtaining the RDN credential, a person can also pursue supplemental training and credentials in specialized areas of care that suit their interests, experience, and career goals. The CDR currently offers seven different board certifications in nutrition subspecialties including gerontology, oncology, nephrology, obesity and weight management, sports and human performance, pediatrics, and pediatric critical care. An advanced practitioner certification in clinical nutrition (RDN-AP) is also offered through the CDR. There are several other advanced specialty certifications that exist and are maintained through external professional organizations. As an example, upon meeting eligibility criteria and passing an examination, an RDN may obtain the credentials of Certified Diabetes Care and Education Specialist (CDCES) through the Certification Board for Diabetes Care and Education.¹⁶ Nutrition professionals can become certified in a number of other specialties to enhance their competency in counseling and education, including eating disorders, personal training and fitness, lactation, nutrition support, lifestyle coaching, and culinary nutrition.

Evolving Scope of Practice in Nutrition

New areas of practice are continually evolving in the field of nutrition. Only a few will be highlighted here, but these examples merely illustrate a small portion of the new and exciting areas of practice that are not yet defined.

The area of emerging nutrition practice within integrated healthcare teams is evolving in patient-centered, “whole-person” philosophy medical “homes” and accountable care organizations. These systems are shifting from a traditional fee-for-service model to a more comprehensive “total” care viewpoint. These integrated systems are rewarded financially for improving health and wellness outcomes. The RDN has an integral basis in determining nutrition diagnosis, delivering appropriate nutrition interventions, and taking credit for client change in health risk reduction.¹⁷

Telehealth, and more specifically, telenutrition, is another promising area of interest for nutrition professionals. Virtual healthcare delivery has been gaining momentum for many years and can be offered using a variety of methods including telephone consultations, video conferencing, mobile apps, email, text messaging, and even data transmission and monitoring through wearable devices. Providing virtual health care became essential during the COVID-19 pandemic when many hospitals and healthcare facilities were forced to limit in-person visits and many other face-to-face services. Telenutrition and other virtual healthcare services are expected to continue to grow and gain more acceptance, further expanding opportunities for nutrition professionals.¹⁸

Although nutrition professionals are only just beginning to use telenutrition as part of their practice, the field of nutritional genomics is getting a great deal of attention. Nutritional genomics is the study of one’s genetic influence on their health and dietary outcomes. Incorporating nutrigenetic testing into nutrition counseling and practice interests many RDNs, but more research is necessary to determine whether expanding this practice will result in improved outcomes.^{19,20}

Globally, groups have met to consider the health economics of medical nutrition therapy in disease-related malnutrition and food insecurity.²¹ Evidence-based nutrition guidelines have begun to evolve to advance research and practice. Ongoing monitoring and evaluation will be needed to direct public health policy and standards. An area of increasing interest is the direct linking of agriculture, nutrition, and health (**Table 1-1**). Internationally, more than 30% of the food grown for human consumption is wasted or is never available for use. Some nutrition professionals have already begun to move their area of influence to the role of farmer and direct food producer.²² The Academy of Nutrition and Dietetics recently established standards of professional practice for RDNs working on the sustainability of healthy food and water supply.²³ (**Figure 1-2**). The framework for RDNs includes future areas of practice that are evolving rapidly in new and exciting directions.

Documentation

The Joint Commission sets standards that are required to address quality-of-care issues in the healthcare environment. Documentation is essential

Table 1-1 Professional Initiatives to Link Agriculture, Nutrition, and Health

Support sustainable farming practices and ecologic agriculture innovation
Encourage international food security and public policy collaboration
Promote farm-to-fork and fork-to-table global education initiatives
Advocate for safe and nutrition-conscious food processing
Partner with retailers to market healthy food options and programs
Educate consumers on evidence-based food preparation and storage methods
Raise awareness for comprehensive reduction of food waste/wasted food
Data from Volgiano C, Steiber A, Brown K. Linking agriculture, nutrition, and health: The role of the Registered Dietitian Nutritionist. <i>J Acad Nutr Diet.</i> 2015;115:1710–1714; and Volgiano C, Brown K, Miller AM, et al. Plentiful, nutrient-dense food for the world: A guide for Registered Dietitian Nutritionists. <i>J Acad Nutr Diet.</i> 2015;115:2014–2018.

to quality patient care and reimbursement, and healthcare professionals need to meet the provisions in the Joint Commission standards. A summary of the professionals’ interventions with the patient or client should be shared with the medical team or other referral source in the medical record using the NCP.¹¹ Documentation is ongoing and supports all of the steps in the NCP. Hospital discharge instructions must be documented and given to the organization or individual responsible for the person’s continuing care.

As the client returns for follow-up appointments, results of health outcomes and goals achieved should be noted. Changes in weight, meal intake, tolerance problems, results of new laboratory values, medications, and skills in self-management may be assessed. Follow-up reassessment with new goals and interventions should be recorded.

Nutrition counselors in private practice need to maintain written policies and procedures for handling private health information (PHI). The Health Insurance Portability and Accountability Act (HIPAA) requires compliance with their standards and regulations for safeguarding the PHI of clients and patients.²⁴ This includes any healthcare information that can identify the person in oral conversations, paper, or electronic form.

In offering remote health care, telehealth service in the United States and Australia has been delivered via video conferencing. When information is transmitted electronically by telehealth or video services, the HIPAA requirements for protection of patient information are still necessary. HIPAA requires maintaining safeguards to protect the security and confidentiality of PHI including personal information transmitted electronically.²⁴

The standards on PHI guarantees privacy and confidentiality of patient medical records and information. In private practice, one is considered a Covered Entity (CE) who may access and transmit PHI and thus must follow HIPAA regulations. Any Business Associates (BA) of CEs who may access or transmit PHI must also follow HIPAA and need a written Business Associate Agreement (BAA) or contract to handle client health information safely and securely.^{24,25}

The professional in private practice is required to have a Notice of Privacy Practices (NPP) and is responsible for giving one to clients. Online resources for documents and explanations can be found at the Department of Health and Human Services (HHS) and the Academy of Nutrition and Dietetics’ websites.^{15,24,25} A person’s laptop in that field that contains PHI should be password protected or encrypted to secure health information. This will allow sending clients their health information in a secure form. Because of the complexity of government regulations and changes in the rules and information, other resources should be examined by those who are affected.

Patient/client information must be safeguarded. There should be policies that restrict use and disclosure of information without authorization. The client’s informed consent and agreement for the use and disclosure of PHI for electronic or phone treatment and for payment purposes is needed. Forms should be signed by the client and documented with a copy to the client. Electronic policies should protect both the client and the practitioner. Professionals should retain in long-term storage electronic or paper copies of electronic communications with clients in a way that maintains confidentiality.

It is important to know whether your incoming and outgoing email messages are encrypted. If not, email messages are not secure and are unprotected as they travel over the Internet. Some configure an automatic reply to acknowledge the receipt of email messages with an added standard text with the practitioner’s name, contact information, and security reminders. Others use email for follow-up because

In a **sustainable, resilient, and healthy food and water system**, all individuals have equitable access to a safe and secure supply of food and water that supports optimal health, both now and in the future. Sustainability is multi-dimensional, and the four domains of sustainable food systems (shown below) are interconnected and overlapping. RDNs can use this framework to convey the multitude of factors that should be considered when implementing measures to promote sustainable food systems, and to identify potential co-benefits and tradeoffs.



Figure 1-2 Sustainable, resilient, and healthy food and water systems framework.

Spiker M, Reinhardt S, Bruening M. Academy of Nutrition and Dietetics: Revised 2020 standards of professional performance for registered dietitian nutritionist (competent, proficient, and expert) in sustainable, resilient, and healthy food and water systems. *J Acad Nutr Diet.* 2020;120(9):1568-1585.e28.

written copies of electronic communications with clients may be subject to less distortion or misunderstanding than verbal follow-up by telephone.

Electronic or paper copies of electronic communications with clients should be retained in secure, protected, long-term storage.^{15,17,24,25}

Electronic Communication

Traditional counseling roles are changing. With advances in technology, nutrition professionals can communicate with clients in multiple ways including Internet, email, texts, and phone. Some have their own websites, social media accounts, and blogs. Our clients have often searched for health and nutrition information using electronic sources.

Electronic healthcare records provide opportunities for optimizing nutrition care. Documenting and sharing nutrition education and counseling allows interdisciplinary communication and integrated support.²⁵ This form of documentation also provides a format for evidence-based research on how nutrition professionals can influence healthcare outcomes.^{12,13}

Nutrition Care Process

The Academy of Nutrition and Dietetics' Nutrition Care Process and Model (NCPM) provides a framework for nutrition and dietetics practitioners to deliver nutrition services over the range of practice areas described in the Scope of Practice for the RDN.¹¹ The Academy defines the Nutrition Care Process (NCP) as “a systematic approach to providing high quality nutrition care,” which is defined by four “distinct interrelated steps”:

- Nutrition **A**ssessment and **R**eassessment
- Nutrition **D**iagnosis
- Nutrition **I**ntervention
- Nutrition **M**onitoring/**E**valuation

The NCPM displays these steps of the Nutrition Care Process in the context of the “internal and external factors that impact application of the NCP” (**Figure 1-3**).

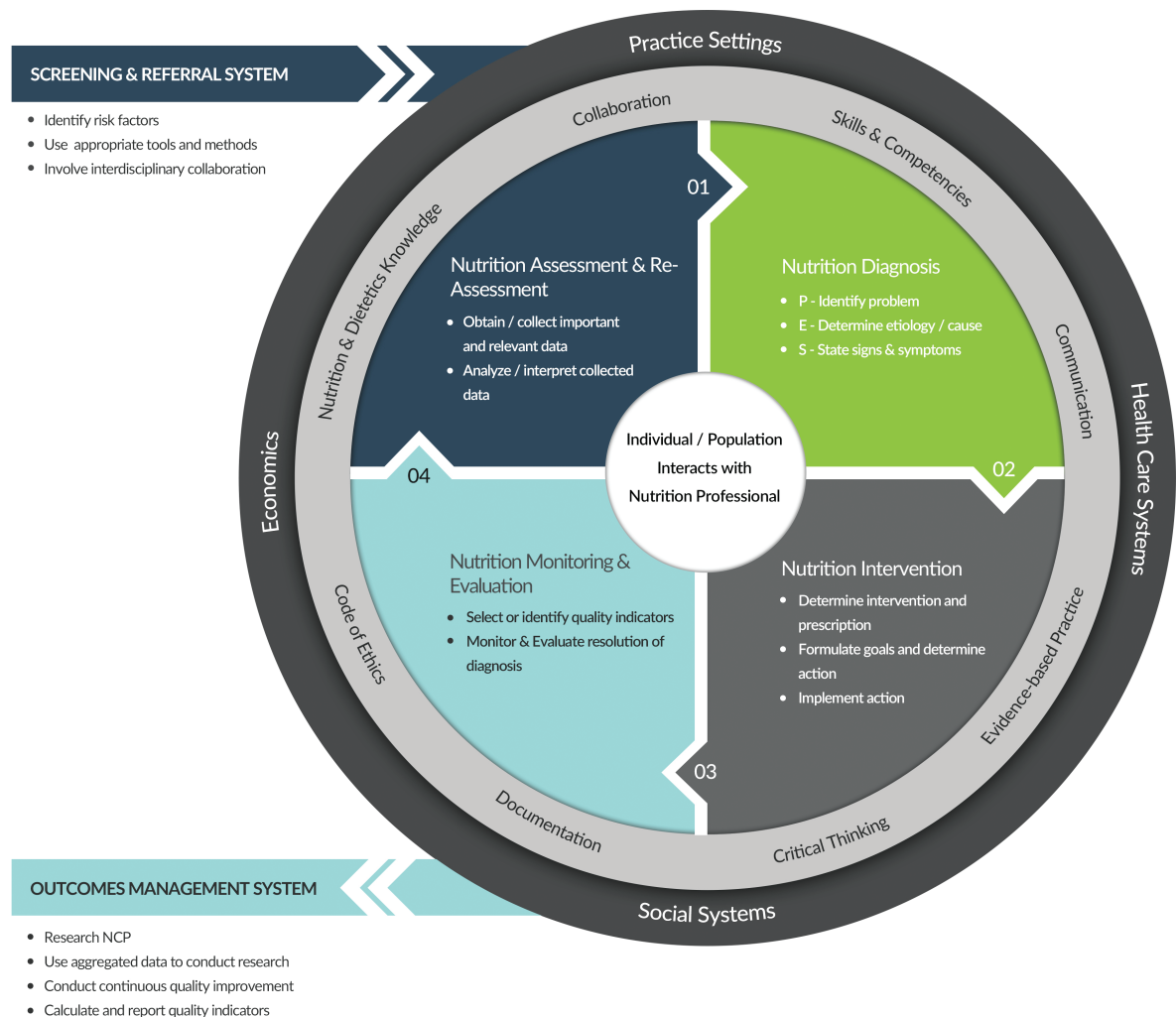


Figure 1-3 The nutrition care process model.

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The Nutrition Care Process Terminology (NCPT) is the standard international language used by nutrition and dietetics practitioners to describe the four steps of the NCP. Comprising over 2,000 terms, the NCPT is used to clearly document nutrition care and services in electronic health records and traditional paper records. The ADIME step documentation format was created to align with the nutrition care process steps. Adoption of a standardized NCPT language aids nutrition research, providing evidence for health outcomes that can be attributed to nutrition intervention—and in turn, links to evidence-based reimbursement for RDN counseling and education.^{12,13,26-28}

It is important to note that even though the NCP and NCPT offer a standardized framework and language, the nutrition and dietetics practitioner uses critical thinking and decision making to individualize care and provide person-centered services.

Step 1: Nutrition Assessment

The purpose of nutrition assessment is “to obtain, verify, and interpret data needed to identify nutrition-related problems, their causes, and significance.”²⁸ Nutrition-related data are collected from patients/clients, the medical record, caregivers, and other family members and health professionals. There are five categories of data of interest: (1) a food/nutrition-related history is often obtained by interviews; (2) anthropometric measurements, such as height, weight, and body mass index (BMI); (3) results of biochemical data, medical tests, and procedures in the medical record; (4) nutrition-focused physical findings, such as visual assessment and the head-to-toe, nutrition-focused physical exam (NFPE); and (5) a client personal history, some of which is in the medical record. Data are compared with standards and interpreted.¹¹

In the assessment step, the nutrition professional gathers data in advance about the patient or client that may have an impact on treatment. Information that is unavailable from the medical record may be obtained during an interview, such as a food and nutrition history. Factors that may have an impact on food and nutrition intake include the role in family, occupation, socioeconomic status, educational level, cultural and religious beliefs, physical activity, functional status, cognitive abilities, and housing situation. For example, the counselor may discover that the individual has been on a previously prescribed diet (NCPT terminology code FH 2.1 representing Food/Nutrition-Related History main category, 2.1 Diet History assessment term).¹¹

The counselor may collect data on current eating patterns or habits; on physical, social, and cognitive environments; and on previous attempts to make dietary changes. The physical environment includes where meals are eaten (at home or in restaurants and in which rooms of the home) and events that occur while eating (socializing, watching television, or reading). The social environment, which may or may not be supportive, includes family members, friends, social norms, and trends involved with eating behaviors (e.g., meeting friends for dinner, popular food items, and beverages when tailgating). The cognitive or mental environment involves the client's thoughts and feelings about food and their self-image and self-confidence. It concerns what clients say to themselves about their food habits and life, since personal thoughts may or may not promote successful change. Positive thoughts, such as “I love a steak and baked potato” or “My favorite snacks are potato chips and beer,” may support continued eating.

There may be negative and self-defeating thoughts or thoughts of failure, boredom, stress, and hunger. Examples include “It's too difficult,” “It's not worth it,” “I can't do it,” “I've been on diets before, always failed, and regained all of the weight I lost,” or “I'm happy the way I am and don't want to change.” These may also support continued eating.

Since behavior is influenced by beliefs and attitudes, the counselor may need to explore these in relation to the medical condition, nutrition, food choices, and health. The client's literacy level and any language barriers should also be noted.

If a problem is identified, the assessment of nutritional status provides baseline information from which to determine the nutrition diagnosis and establish interventions that are realistic. Once all of the data for the assessment are collected, the counselor must integrate and assimilate what they have read, heard, and observed to distinguish relevant from irrelevant data, identify discrepancies and gaps in the data, and finally organize the data in a meaningful way and document the assessment.¹¹

Step 2: Nutrition Diagnosis

The purpose of the nutrition diagnosis is “to identify and describe a specific nutrition problem that can be resolved or improved through treatment/nutrition intervention by a nutrition professional.”¹¹ The nutrition diagnosis is what the RDN is treating independently and differs from the medical diagnosis identified by the physician.

The data from the nutrition assessment are used to label the nutrition diagnosis. The nutrition diagnosis is organized into three categories: (1) intake (NI), such as amount of food or nutrients consumed compared with needs; (2) clinical (NC), such as problems related to medical or physical conditions; and (3) behavioral–environmental (NB), such as attitudes, beliefs, and the person’s physical environment. For example, the medical diagnosis for a dialysis patient may be “kidney failure,” but the nutrition diagnosis terminology using the NCPT may be “NI-5.10.2 excessive potassium intake” or “NB-1.1 food- and nutrition-related knowledge deficit.”^{11,28}

The nutrition diagnosis, selected from the list of diagnoses from the NCPT standardized terminology, is written in a PES statement describing the problem (P), its etiology (E) or cause, and signs and symptoms (S) or evidence data.¹¹ The format of the PES statement is “nutrition problem label related to ____ as evidenced by ____.” The problem (P) *related to* etiology (E) *as evidenced by* signs/symptoms (S). The problem (P) or nutrition diagnosis label describes alterations in the person’s nutritional status. It is followed by etiology (E), the potential cause or contributing factors, and is linked to the diagnosis by the words “related to.” The signs/symptoms (S) are the data used by the nutrition practitioner to determine that the person has the specified nutrition diagnosis and is linked to the etiology by the words “as evidenced by.”^{11,28}

Table 1-2 is an example of the PES.

Documentation is essential throughout the NCP and is a process that supports all four steps.²⁰ After selecting the most essential diagnoses to work on, the system of charting may be reoriented to capture, in one or two sentences, the diagnosis based on the assessment. The recommendation is to document the diagnosis in the three-step PES. The PES could be entered into the notes section of an electronic medical record or remain as a written chart note in other documentation systems.

Step 3: Nutrition Intervention

Nutrition intervention is defined as “purposefully planned actions intended to positively change a nutrition-related behavior, environmental condition, or aspect of health status for an individual (and his or her family or caregiver), target group, or the community at large.”^{11,28} The purpose is “to resolve or improve the identified nutrition problem by planning and implementing appropriate nutrition interventions that are tailored to the patient/client’s needs.”^{11,28} The nutrition intervention is determined by the nutrition assessment, nutrition diagnosis, and the client’s goals. The focus of the intervention is to address the etiology or causes of the nutrition problem described in the PES statement.

There are four general categories of NCPT interventions: (1) food and/or nutrient delivery (ND), such as meals, supplements, or alternative feeding methods; (2) nutrition education (E), such as providing information and skills to modify eating behaviors to improve health; (3) nutrition counseling (C) to create individualized nutrition plans to improve health; and (4) coordinated nutrition care (RC), such as coordination with or referral to other healthcare providers. There are two inter-related components: a planning stage and the implementation stage. Planning the nutrition intervention involves prioritizing the nutrition diagnosis, consulting the Academy’s Evidence-Based Nutrition Practice Guidelines, determining patient-focused expected outcomes for each nutrition diagnosis, conferring with patients/clients/caregivers, defining a nutrition intervention plan and related strategies, defining time and frequency of care, and identifying resources needed. Implementing the nutrition intervention is the action phase and involves communicating with the nutrition care plan and carrying out that plan.^{12,13}

The nutrition intervention incorporates the client’s goals. The goals recommend the information, knowledge, and skills that the client needs to

Table 1-2 Example of the PES System Integrating Nutrition Care Process Terminology Codes

Problem (P)	Etiology (E)	Signs and Symptoms (S)
<i>Specific nutrition diagnosis</i>	<i>Related to etiology</i>	<i>As evidenced by signs and symptoms</i>
Overweight (NC-3.3)	Related to excessive energy intake (NI-1.5)	As evidenced by significant fast-food consumption and weight gain up to 10 lb in 3 mo (FH-1.2.2.3)

Nutrition Diagnostic: NC, Clinical; NI, Nutrition Intake; Nutrition Assessment and Monitoring and Evaluation: FH, Food/Nutrition-Related History.

make dietary changes. The counselor judges what information to provide, how much information can be absorbed at each session, at what educational or literacy level, and what handouts and media to use as supplements. The amount of information to provide and the best method of doing so must be individualized and matched to the client's cultural influences.

The intervention may include nutrition education or counseling, for example, about the following topics and activities: reading food labels, adapting recipes, menu planning, restaurant or carry-out meals, principles of healthful eating, food safety, nutrients in selected foods, nutritional supplements, nutrition misinformation, fat, protein, carbohydrate, sodium, or calorie counting, nutrient–drug interactions, managing appetite, and the relationship of nutrition to the health problem. Additionally, the client needs to know about physical activity, self-monitoring of diet and activity, and self-management. Problem-solving interventions for meal planning, food preparation, and food purchasing may be needed. Culturally sensitive interventions are important in meeting the needs, desires, and lifestyles of ethnic clients.

By the end of a counseling session, the client should not only know what to do and how to do it but also be committed to doing it. Clients should be asked to summarize their plans to check for understanding and commitment. To succeed, the client has to perceive and accept the need for change. Motivation for change should be explored, as well as the health dangers in continuing the current dietary patterns. Solely providing information about a dietary regimen is not usually enough to interest or enable people to improve their eating practices. The counselor may suggest others with whom the client can discuss the goals, since a public commitment may help the person to achieve their goals more easily.

The counselor obtains and documents the client's commitment to specific action behaviors at specific times. Practitioners frequently ask clients to keep self-monitoring records between appointments. Self-monitoring is a process in which the person observes and records information about dietary intake, physical activity, body weight, and eating environments. Self-monitoring is coupled with setting goals, and it may increase or decrease the frequency or intensity of existing behaviors. Clients' personal records, observations, and analyses of their environment contribute to their personal awareness and understanding. Clients may submit

these records in advance or bring them to their next appointment as a way to learn about factors affecting eating behaviors and as a demonstration of a commitment to change.

Step 4: Nutrition Monitoring and Evaluation

Nutrition monitoring and evaluation together comprise the fourth step in the nutrition care process (NCP). The purpose of this step is to “determine and measure the amount of progress made for the nutrition intervention and whether the nutrition-related goals/expected outcomes are being met.”¹¹ The nutrition professional identifies patient/client outcomes relevant to the nutrition diagnosis, intervention plans, and goals. To determine progress, the practitioner identifies changes in behaviors, goals, or standards of care that are desired as the result of the nutrition care. This involves monitoring, measuring, and evaluating any changes in nutrition care indicators, the patient/client's previous status, reference standards, and the differences between assessment and reassessment.¹¹

Monitoring is the follow-up step while evaluation is the comparison step, whether it is comparison to the previous visit or comparison to a standard or goal. During the first interaction, the counselor should identify appropriate outcomes to be monitored and evaluated at subsequent interactions. These outcomes are used to demonstrate the amount of progress made and whether goals or outcomes are being met.^{11,28} After determining progress, a person may need to adjust the recommendations so that progress is made toward the goals. Determining what the intervention should be as well as the evaluation mechanisms are unique to each person, and the Academy's Evidence Analysis Library (EAL) provides the framework for basing the NCP on available evidence of best practices.^{12,13}

An outcome is the measured result of the client's changes due to the counseling and education process. There are four categories of outcomes organized in nutrition monitoring and evaluation: (1) food/nutrition-related history outcomes, such as changes in dietary intake, physical activity, or knowledge and behaviors; (2) anthropometric measurement outcomes, such as weight, height, and BMI; (3) biochemical data, medical tests, and procedure outcomes including lab data and tests; (4) nutrition-focused physical finding outcomes, such as physical appearance and appetite.^{11,28} Other outcomes may

include patient acceptance, progress at self-care and self-management, and improvements in knowledge. The counselor should keep precise records of the client's issues and goals, the factors influencing them, and the intervention for future measurement of client change. Outcomes indicate the impact of the intervention and can be used to evaluate the effectiveness of the treatment. The counselor and client should engage in evaluation together.

Outcome data identify the benefits of medical nutrition therapy in patient and client care. In using these quality control systems, nutrition and dietetics counselors may wish to evaluate several things: (1) the success of the client in following the goals set and in implementing new eating behaviors; (2) the degree of success of the nutrition intervention, including its strengths and weaknesses; and (3) their own personal skills as counselors.

Some monitoring and evaluation tools or data sources are questionnaires, interviews, anthropometric assessments, biochemical and medical tests, and food and nutrition intake records. The blood pressure and lipid levels of cardiovascular patients can be monitored, for example, although they are more difficult to evaluate because they may depend

on factors beyond dietary adherence. Despite the client's commitment to dietary change, results may not show that the client is actually adhering to the regimen. The healthcare team can work together to assess these outcomes and adjust the treatment to achieve or maintain treatment goals.

Self-monitoring records kept by the client should be examined jointly, discussed, and difficulties should be identified and resolved. Ignoring the records may make the clients feel that they are not considered important. Support and reinforcement to strengthen desirable habits along with gradual, planned changes should continue as long as necessary until the client is able to self-manage successfully.

Regular follow-up appointments should be scheduled if possible, as enthusiasm for change may decline during the first week and even more during the second week because obstacles develop. One session with a client is not enough to promote long-term change in health practices, and counselors in acute care settings who are not able to attend follow-up meetings may need to refer patients to nutrition and dietetics counselors in outpatient settings or in private practice.

Summary

The current and expanding scope of the nutrition professional's roles relies on communication, counseling, and education skills. The Scope of Practice Framework of the Academy of Nutrition and Dietetics provides a template for present and future boundaries of practice and provides quality, safe care

to those we serve. The use of the NCP standardized language and NCPT terminology improves our communication in providing effective and high-quality nutrition care linked to positive health outcomes. New and exciting opportunities in advanced practice are rapidly evolving.

Case Challenge

Melissa, a 45-year-old woman, made an appointment with a Registered Dietitian Nutritionist (RDN) in the outpatient center to get counseling for her recent prediabetes diagnosis. Melissa works full-time as a professor, often going out to lunch with coworkers. Her husband works full-time in software sales. They have three school-age children. Her mother comes to watch the children after school until she comes home. She is 5'5" tall and weighs 170 lbs. Her usual body weight prior to having children was 135 lbs. She learned about her new prediabetes diagnosis at her primary care physician appointment last month.

Melissa described her daily schedule. She gets up early to make breakfast and to help the children get ready for school. After work, she is tired and the children are hungry and clamoring for dinner, so she describes dinner as a "rush job" or something brought in. She spends the rest of her evening helping children with homework, miscellaneous home chores, or catching up on grading student assignments. She describes herself as "exhausted."

Case Analysis

1. Review the current standards of practice (SOP) and standards of professional performance (SOPP) for an entry level RDN. Identify the SOP or SOPP that would apply to interfacing with Melissa.
2. What other healthcare professional team members might collaborate in Melissa's prediabetes diagnosis?
3. Review the NCPT assessment terminology. What assessment information do we know about Melissa, and what additional information do you still need to collect?
4. How would you express the potential nutrition assessment using the NCPT?
5. What is a potential nutrition diagnosis for Melissa? Write a PES statement for Melissa.
6. What is a potential nutrition intervention for Melissa? How would you express the potential nutrition intervention using the NCPT?
7. What would be a potential nutrition monitoring and evaluation plan for Melissa? How would you express this using the NCPT?

Self-Assessment

1. What is an evolving area of nutrition practice that you would like to explore? What area of nutrition practice do you envision developing in the future and why?
2. Identify members of the healthcare team. Describe how you might interact with them
3. to deliver optimal health outcomes. Envision ways that multiteam collaboration might create new initiatives in the future of evolving nutrition practice.

Review and Discussion Questions

1. What are the six main elements of one's individual scope of practice?
2. What are the four steps in the Nutrition Care Process (NCP)?
3. What does the nutrition professional do at each of the four steps in the NCP?

Suggested Activities

1. Reach out to a local registered dietitian nutritionist to interview them about how they use the Nutrition Care Process. What have they found most helpful about using the NCPT? Most challenging?
2. Visit the Academy of Nutrition and Dietetics' Telehealth page: <https://www.eatrightpro.org/practice/practice-resources/telehealth> for many helpful resources. Review the cases under Practicing Telehealth <https://www.eatrightpro.org/practice/practice-resources/telehealth/practicing-telehealth>
3. Read the Academy of Nutrition and Dietetics' Scope of Practice and Standards of Practice and Standards of Professional Performance.

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