CHAPTER

Nutrition Care Process

Prior to the creation of the Nutrition Care Process (NCP), there was no single standardized method for documenting nutrition care services and establishing the benefit provided by those services. This lack of standardization made it difficult to extract data about the results of the care provided by each nutrition and dietetics practitioner. Medical nutrition therapy (MNT) was evaluated as a possible way to standardize care. However, MNT is a method for using nutrition care to treat a medical diagnosis that lacks definitions for care processes and outcomes. For that reason, MNT is an element of NCP but is not the total process. Therefore, a standardized method needed to be developed. A brief history follows:

- 1998: The American Dietetic Association (ADA; now the Academy of Nutrition and Dietetics)
 Health Services Task Force (now the Council on Research) considered MNT as a method for documentation, but this method was found to be too limited, and MNT was rejected in this capacity by the committee.
- 2001: A focus group was established to identify the value of nutrition services.
- 2002: The Nutrition Diagnosis and Nutrition Care Process Task Force made recommendations to ADA leadership.
- 2003: The Nutrition Care Process Standardized Language Committee began developing a standardized language for the dietetics profession.
- 2003: The Nutrition Care Process and Model (NCPM) was published in the *Journal of the American Dietetic Association*.
- 2005: The first standardized nutrition diagnosis language for dietetics was published in the Nutrition Diagnosis Manual.
- 2007: The International Dietetics and Nutrition Terminology (IDNT) Reference Manual was first

- published, with further editions published biannually between 2009 and 2013. These publications expanded standardized terminology to include nutrition assessment, nutrition intervention, and nutrition monitoring and evaluation as well as nutrition diagnosis.
- 2014: The electronic Nutrition Care Process Terminology (eNCPT) was released.

NUTRITION CARE PROCESS OVERVIEW

As noted by Lacey and Pritchett in the original article about the NCP, "providing high-quality nutrition care means doing the right thing at the right time, in the right way, for the right person, and achieving the best possible results" (1). The purpose of the NCP is to support the critical-thinking process of dietetics practitioners and give them a standardized terminology for documenting in a consistent manner the individualized nutrition care provided to each resident/client or group. By establishing a standardized process for providing care, the NCP helps improve data collection and analysis about the outcomes of that care. Thus, dietetics practitioners can measure the evidence about care, rather than relying on experience and other subjective, nonstandard measures. The use of evidence-based care makes the registered dietitian nutritionist (RDN) and the nutrition and dietetics technician, registered (NDTR) the expert nutrition services providers (2).

The NCP has four distinct steps along with two supporting systems (see Box 5.1 and Figure 5.1) (3):

- Step 1: Nutrition assessment
- Step 2: Nutrition diagnosis
- Step 3: Nutrition intervention
- Step 4: Nutrition monitoring and evaluation

BOX 5.1 Four Steps in the Nutrition Care Process

- Step 1: Nutrition assessment—To obtain, verify, and interpret data to identify a nutrition-related diagnosis.
- **Step 2: Nutrition diagnosis**—To identify nutrition diagnoses that are clear within and outside the profession that the food and nutrition professional is responsible for treating independently. The nutrition diagnosis is conveyed in a problem-etiology-symptoms (PES) statement.
- **Step 3: Nutrition intervention**—To plan and implement the nutrition interventions needed to improve or resolve the nutrition-related diagnosis. The interventions are directed at the etiology of the diagnosis (PES statement).
- **Step 4: Nutrition monitoring and evaluation**—To determine and measure the amount of progress made for the interventions and to see if related goals/outcomes are met, thus determining the effectiveness of the interventions by selecting care indicators and the criteria to which the indicator is compared.

Source: Academy of Nutrition and Dietetics. Nutrition assessment introduction. Nutrition Terminology Reference Manual (eNCPT): Dietetics Language for Nutrition Care. Nutrition Care Process Introduction. http://ncpt.webauthor.com/pubs/idnt-en. Accessed January 25, 2016...

Practice Settings SCREENING & REFERRAL SYSTEM Skills & Competence Collaboration · Identify risk factors Use appropriate tools and methods · Involve interdisciplinary collaboration 01 **Nutrition Diagnosis** Nutrition Assessment & Reassessment · P - Identify problem Obtain/collect important • E - Determine etiology/cause and relevant data S - State signs & symptoms Analyze/interpret collected data Individual/Population Interacts with 04 Nutrition Professional **Nutrition Monitoring Nutrition Intervention** & Evaluation · Determine intervention · Select or identify quality and prescription indicators · Formulate goals and Monitor and evaluate determine action resolution of diagnosis · Implement action 03 Documentation Critical Thinking **OUTCOMES MANAGEMENT SYSTEM** Social Systems Research NCP

Figure 5.1 The Nutrition Care Process Model

- · Use aggregated data to conduct research
- Conduct continuous quality improvement
- · Calculate and report quality indicators

Source: Reprinted with permission from the Academy of Nutrition and Dietetics. Nutrition Terminology Reference Manual (eNCPT): Dietetics Language for Nutrition Care. http://ncpt.webauthor.com.Accessed January 25, 2016.

The supporting systems are

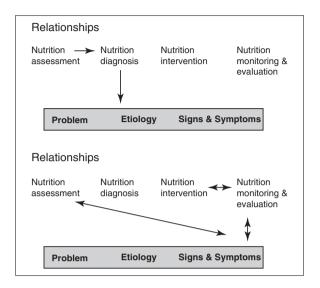
- · screening and referral systems and
- · outcomes management systems.

The screening and referral systems can be completed by the RDN or inpatient nutrition staff; however, nutrition screening is most often completed by other health care professionals. The outcomes management systems track the progress of a group of multiple residents/clients through the NCP, as opposed to the progress of an individual. Outcomes management is an important part of the total quality management and performance evaluation. The analysis of outcomes data (evidence) helps dietetics practitioners modify performance and practice to improve the quality of care.

In brief, if a nutrition screen/referral indicates a potential problem that could benefit from nutrition care, the RDN begins the standardized NCP by conducting a nutrition assessment (Step 1). If the RDN then determines that there is a nutrition problem, he or she makes a nutrition diagnosis (Step 2). Next, the RDN plans and implements a nutrition intervention that addresses the identified nutrition problem/ diagnosis (Step 3). Outcomes of the intervention are subsequently monitored and evaluated (Step 4). This may reveal that the client or group needs further assistance from the RDN to reach recommended nutrition goals. If so, the NCP cycle should continue until goals are met. Figure 5.2 demonstrates how the NCP steps provide a framework for the provision of nutrition care for residents/clients or groups.

As described in the remainder of this chapter, each step in the NCP has its own set of critical thinking skills to assist the RDN in determining the needs of each step. The Academy's Career Development Guide (CDG) has adapted the Dreyfus Model of Skill Acquisition to outline the progression of critical thinking skills of the RDN and NDTR as they improve their knowledge and experience with their practice. The CDG lists the following stages of progress: novice, beginner, competent, proficient, and advanced practice/expert. The foundation of dietetics is developed in the novice and beginner stages. The competent stage is the entry-level knowledge and skills base that was developed to apply to the care settings. This stage is where the development of critical thinking skills improves as work experience is obtained. The proficient stage is when the RDN and NDTR have developed their ability to prioritize, generalize, apply problem-solving skills to new scenarios, and identify innovative solutions utilizing their critical thinking skills. Critical thinking skills need to be intuitive for the RDN and NDTR to transition into the advanced practice/expert stage (4). The Academy has updated Scope of Practice and Standard of Professional

Figure 5.2 Relationships of Nutrition Care Process Steps



Source: Academy of Nutrition and Dietetics. Nutrition assessment introduction. Nutrition Terminology Reference Manual (eNCPT): Dietetics Language for Nutrition Care. NCP Step 1: Nutrition Assessment. http://ncpt.webauthor.com/pubs/idnt-en/page-001. Accessed January 25, 2016.

Practice documents for the RDN and the NDTR. The practice paper, "Critical Thinking Skills in Nutrition Assessment and Diagnosis," on critical thinking skills related to the NCP is available at the Academy's website (see www.eatrightpro.org) (5).

Step 1: Nutrition Assessment

Nutrition assessment is a systematic method of obtaining, verifying, and interpreting data needed to identify nutrition-related problems, their causes, and their significance (6). As noted previously, the assessment may be initiated by a referral and/or by the screening of individuals or groups for nutritional risk factors. Following a resident/client referral or a positive nutrition screening, the RDN uses nutrition assessment to determine whether the resident/client might benefit from nutrition care and if a nutrition diagnosis/problem exists. If, after the initial assessment or reassessment is completed, the RDN determines that a nutrition problem does not exist or has been resolved or that there is no nutrition intervention that would benefit the resident/client, then discharge or discontinuation from nutrition care would be appropriate.

Assessment data should be relevant, accurate, and timely. The purpose of nutrition assessment is to verify and interpret the information needed to determine whether nutrition problems/diagnoses exist. The use of standardized nutrition assessment language enhances the communication between RDNs, their residents/clients,

and other health care professionals. Nutrition assessment terminology groups assessment data into five different domains. (See Box 5.2.)

BOX 5.2 Five Domains of Nutrition Assessment (Step 1)

- Food/Nutrition-Related History
- Anthropometric Measurements
- Biochemical Data, Medical Tests, and Procedures
- · Nutrition-Focused Physical Findings
- Client History

Source: Academy of Nutrition and Dietetics. Nutrition assessment introduction. Nutrition Terminology Reference Manual (eNCPT): Dietetics Language for Nutrition Care. Nutrition Assessment Snapshot. http://ncpt.webauthor.com/pubs/idnt-en/page-022. Accessed January 25, 2016.

The nutrition assessment includes:

- reviewing data collected to identify factors that affect nutritional and health status;
- clustering data elements that support a nutrition diagnosis as described in the nutrition diagnosis reference sheets published in the Nutrition Care Process Terminology; and
- identifying standards against which the assessment data will be compared.

The specific types of data collected in the assessment step vary depending on the practice settings, the present health status of the individual or group, how data relate to the outcomes to be measured, recommended practices (such as Evidence-Based Nutrition Practice Guidelines), and whether the assessment is an initial evaluation or a reassessment.

Nutrition assessment requires making comparisons between the data collected and reliable standards of care. It is an ongoing process that involves not only the initial data collection but also the continual reassessment and analysis of resident/client or group needs. The nutrition assessment provides the groundwork for determining the nutrition diagnosis in the second step of the NCP.

The nutrition and dietetics practitioner uses critical thinking skills during nutrition assessment to ensure that appropriate care is provided (see Box 5.3). Examples of critical thinking in nutrition assessment include the following: determining the appropriate data to collect, validating the data, and distinguishing relevant from irrelevant data in order to arrive at the most appropriate nutrition diagnosis.

Step 2: Nutrition Diagnosis

Nutrition diagnosis is a critical step between nutrition assessment and nutrition intervention. Its purpose is to identify and describe a specific nutrition problem that can be resolved or improved through interventions by the RDN.

Nutrition diagnosis should not be confused with medical diagnosis. A medical diagnosis can be defined as a disease or pathology of specific organs or body systems that can be treated or prevented. A medical diagnosis does not change as long as the disease or condition exists. However, a nutrition diagnosis can change as the resident's/client's or group's response changes. For example, a resident/client may have the medical diagnosis of type 1 diabetes, which will not change until a cure for the disease is found. However, the nutrition diagnosis for this individual could vary over time. At one point, a nutrition assessment may lead the RDN to diagnose, for example, "Inconsistent carbohydrate intake"; later, the nutrition diagnosis "Excessive carbohydrate intake" might be better supported by the assessment data.

After evaluating the assessment data and determining the nutrition diagnosis(es), the RDN has an evidence base for developing interventions, setting realistic goals and measurable expected outcomes, and tracking the progress in meeting those expected outcomes. Nutrition assessment data should be clustered as signs and symptoms that support the nutrition diagnoses documented by the RDN. Diagnoses should be prioritized based on critical assessment of what problems are most important to resolve and within the RDN's scope of practice to address. The standardized nutrition diagnosis terms are

BOX 5.3 Critical Thinking Steps During Nutrition Assessment

- Determining appropriate data to collect
- Determining the need for additional information
- Selecting assessment tools and procedures that match the situation
- Applying assessment tools in valid and reliable ways
- Distinguishing relevant from irrelevant data
- Distinguishing important from unimportant data
- Validating the data

Source: Academy of Nutrition and Dietetics. Nutrition assessment introduction. Nutrition Terminology Reference Manual (eNCPT): Dietetics Language for Nutrition Care. Nutrition Assessment Snapshot. http://ncpt.webauthor.com/pubs/idnt-en/category-1. Accessed January 25, 2016.