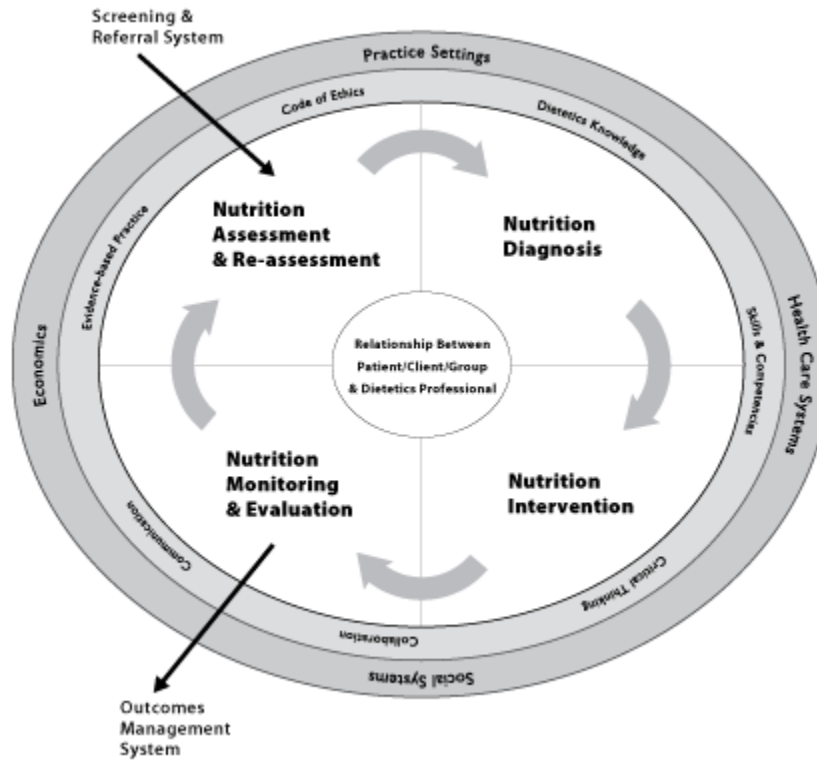Alaina Petagno
6/7/16
English 202

# The Nutrition Care Process



The Nutrition Care Process (NCP) is a four-step process to aid the RD (registered dietitian) in providing individual health care to a patient. An RD will use this systematic approach to understand, diagnose, treat, and monitor a patient. Each four-step process is divided into domains based on specific needs of the individual. Using this process in practice will aid the dietitian in providing optimum health care to a patient. The four steps are nutrition assessment, diagnosis, intervention and monitoring/evaluation.

**Screening:**

Before we get started with the four-step process, there is a pre-step called nutrition screening. Although, this is not performed by a registered dietitian, it is a very important step. In this step a nurse, or other health care professional, will perform a nutrition screening on an individual to determine if the patient is at risk for a nutritional problem. There are various screening tools that can be used to determine an at risk patient. The "MUST" screening tool uses a scoring system based on BMI, weight loss, and illness. If a patient receives a score of two or higher he/she is described as being at risk. The "MNA" screening tool uses a similar scoring system based on food intake, weight loss, mobility, psychological stress, and BMI. If an individual receives a score of eight or lower he/she is described as at risk. Once the health care professional has determined that an individual is at risk, the patient will be referred to the RD for further evaluation and this will lead to the first official step of the NCP.



Figure: 1 Describes the MNA screening tool used by another health care professional to determine if a patient is at risk.

**Assessment:**

The first step in the NCP is nutrition assessment and re-assessment. In this step the RD will assess and re-asses an individual who is at nutritional risk. According to the Academy of Nutrition and Dietetics, the purpose of nutrition assessment "is to obtain, verify, and interpret data needed to identify nutrition-related problems, their causes, and significance." The RD will first obtain, then analyze and document data of the individual's health. Because this step is an ongoing process, there is continual re-assessment and analysis of the patient's status. Data collection can be obtained via interview, observation, measurements, and health record. There are five domains to obtain data from the individual. Each domain is then divided into classes/subclasses and is given an alpha-numeric number to organize. The first domain is food

nutrition related history. There are many classes/subclasses in this domain to obtain data from. For example there is food intake and administration, patient knowledge and beliefs, behavioral factors, and many more. Each of the classes are important in grasping a full understanding of the patient. The second domain is anthropometric data, such as, height, weight, BMI, growth patterns, and body composition. This data is used to understand if a patient is within healthy limits externally. The third domain is biochemical data, such as, blood levels, electrolytes, and glucose levels. This information is used to understand the patient's internal status. This data is helpful for nutritional problems that are unrecognizable on the external surface of the individual. The fourth domain is nutrition focused physical findings. This involves observing an individual's physical appearance from muscle to fat loss to chewing and breathing ability. The fifth domain is client history. Obtaining information, such as, personal history, medical history, and social history is collected. Obtaining histories are important to understand a patient's religious aspects, such as, being a vegetarian and social status, which could play a role in food insecurity. Once information is collected, competitive standards are used to determine a diagnosis for the patient, which leads to the next step of the process.

### Physical Findings Used in Nutrition Assessments 1

Adapted from Ellie Whitney and Sharon Rady Rolfes; Under standing Nutrition, **Twelfth Edition**. 2011

| Body System | Healthy Findings | Malnutrition Findings | What the Findings Reflect |
|---|---|---|---|
| Hair | Shiny, firm in the scalp | Dull, brittle, dry, loose; falls out | PEM |
| Eyes | Bright, clear pink membranes adjust easily to light | Pale membranes; spots; redness adjust slowly to darkness | Vitamin A, B vitamin, zinc, and iron |
| Teeth and gums | No pain or caries, gums firm teeth bright | Missing, discolored, decayed teeth; gums bleed easily and are swollen and spongy | Mineral and vitamin C status |
| Glands | No lumps | Swollen at front of neck | PEM and iodine status |
| Tongue | Red, bumpy, rough | Sore, smooth, purplish, swollen | B vitamin status |

Dr. Siham Grith

Table: 1 Describes areas of observation used in the physical findings domain of nutrition assessment.

**Diagnosis:**

The second step of the NCP is nutrition diagnosis. According to the Academy of Nutrition and Dietetics the purpose of this step "is to identify and describe a specific nutrition problem that can be resolved or improved though nutrition intervention." The process included identifying and naming a problem in a PES statement. In this step, the diagnoses are organized into three domains, with an alpha-numeric code, divided into classes/subclasses. To determine the nutrition diagnosis, a terminology sheet is used to give a proper alpha-numeric code. First, the RD will determine an appropriate diagnosis using one of the three domain categories listed on a terminology sheet. One diagnoses domain is called nutrition intake. This domain is used if the problem is related to intake, such as, nutrients, fluids, and bioactive substances. Another domain is clinical, and is used if the findings are related to clinical problems, such as, medical or

physical conditions. This also includes functional, biochemical, weight, and malnutrition disorders. The behavioral-environmental domain is used if the problem is related to knowledge, attitude, environment, and access to food. By selecting an individual domain, the RD can individualize a diagnosis for a patient making it specific to their needs. Once the problem is identified, the nutrition diagnosis or PES statement will be made. The PES statement is a structured sentence based on accurate nutrition data that explains the individual's problem. There are three parts to the PES statement; problem, etiology, and signs/symptoms. The problem is stated with the alpha-numeric code related to the etiology as evidenced by the signs/symptoms. The "P" of the statement is the specific nutritional problem the patient is undergoing. The "E" of the statement is the etiology, or root cause. This is the most important aspect to identify, as it will help determine a proper intervention. The "S" will describe the signs and symptoms the patients is experiencing. The PES statement will be clear and accurate in order to determine the individualized prescription for the patient. By providing a specific nutrition diagnosis, this will aid in determining the intervention of the patient, which leads to the next step.
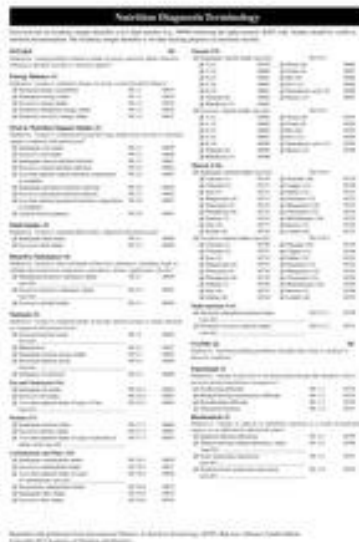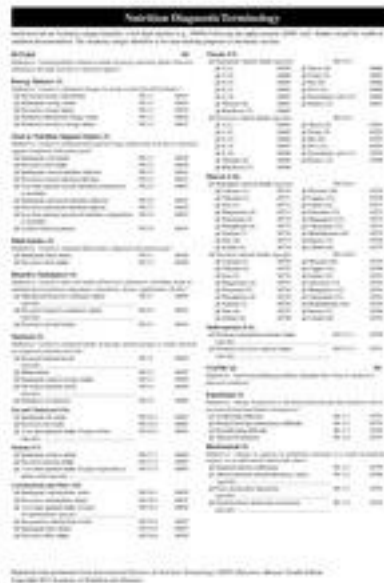


Figure: 2 Describes a nutrition diagnosis terminology sheet used to determine a correct alpha-numeric code.

**Intervention:**

The third step of NCP is nutrition intervention. According to the Academy of Nutrition and Dietetics the purpose "is to resolve, or improve the diagnosis." This can be done by advice, education, meal planning, or delivery of food. The process involves two phases, planning and implementing an intervention. First, the RD will plan the intervention based on the problem, safety, and patient needs. Next, the nutrition prescription is prescribed to the patient. The prescription is based on the etiology and is aimed to resolve the underlying cause of the problem. A reference sheet to determine the prescription will be used. There are four domains of the reference sheet to individualize care for the patient. The domains include nutrient delivery, nutrition education, nutrition counseling, and nutrition care by a professional. Then, the RD will implement the plan. This is known as the action phase, and the plan will be carried out and

communicated to all those relevant, including the nurses, doctors, and patient. Once the prescription plan has been implemented, it is necessary to determine if it is working, or not, leading to the next step.



Figure: 3 Describes the nutrition intervention terminology sheet used to determine the correct alpha-numeric code.

**Monitoring and evaluation:**

The fourth step of the NCP is monitoring and evaluating. According to the Academy of Nutrition and Dietetics the purpose of this step "is to determine and measure the amount of progress made by the intervention." The process involves determining what to measure, and collect data of the patient's progress to monitor and evaluate the outcome. Monitoring and evaluation is primarily used to determine if the goals expected are being met, or not. In this process the RD will determine what to measure, such as, food intake, anthropometric data, biochemical data, physical appearance observation, or patient personal items. Once the measurements are selected and collected, the data will be analyzed for changes, and compared to previous data, or standards. Next, the RD will monitor the progress by checking the patient's understanding of the intervention, and identify positives/negatives of the outcome. If the goals are not being met, information for lack of progress will be selected and supported with evidence. Then the RD will measure outcomes based on a standardized nutrition care indicator. Next, evaluation of outcomes will be conducted by comparing monitored data with the prescription goals to determine future action. Lastly, reassessment occurs to reassure the patient has met the goals, and can be discharged.

**Summary:**

        The NCP is a four-step systematic approach to ensure quality nutritional care. The process consists of nutrition assessment, diagnosis, intervention, and monitoring/evaluation. The first step, nutrition assessment, is used to obtain, verify, and analyze data. Then, the RD will give a diagnosis by identifying and describing a specific nutrition problem in a PES statement. Next, the intervention is used to resolve, or improve the diagnoses. Lastly, the progress made by the intervention is determined and measured in the monitoring and evaluation process. By using the domains and classes/subclasses, each step is made specific to individualize health care to a patient. An RD will use this process to understand, diagnose, treat, and monitor a patient who currently has, or at risk for, a nutrition problem.

**Reference :**

https://www.andeal.org/vault/2440/web/files/20140602-NA%20Snapshot.pdf

https://www.andeal.org/ncp