Nutrition Care Process Model Tutorials

Nutrition Care Process and Terminology Committee
Academy of Nutrition and Dietetics

Nutrition Care Process Terminology
2015 Edition

Nutrition Assessment:
Examples in Two Case Studies

Objective

The objective of this presentation is to review and feature the use of Nutrition Assessment terminology in case study material for two different patients. By the end of this module the participant will be able to understand use of nutrition assessment terminology in two case examples:

- A 67 year old Hispanic male with heart failure
- An 8 year old white male child with iron deficiency anemia and food allergies

Case #1

Referral from Family Practice Clinic to RDN:

67 year old Hispanic male with Heart Failure

Step 1: gather data from medical records

Step 2: verify in patient interview

Step 3: complete nutrition history questionnaire

Step 4: Identify indicators and establish whether the data are within normal parameters using comparative standards

Case #1

Description of patient:

- 67 year old Hispanic male
- medical diagnosis of heart failure (diagnosed 2 months prior)
- retired engineer
- lives alone in apartment
- height: 5'6" ; weight: 135 lbs.
- weight loss of 20 lbs. from dyspnea
- inability to consume large meals
- unable to shop or cook
- 24-hour recall indicates he uses many frozen and processed foods; intake between 1000 – 1200 kcal/day

Case #1: Identify Terms

Begin the process of identifying terms by asking the following questions:

- Which terms can be used to describe the data so that it can be extracted in the future?
- Which data are new vs. already existing in the medical record?
- What parameters or comparative standards can be used to evaluate the data?
- What additional data are needed to make a definitive nutrition diagnosis?

Cardiology Key Nutrition Assessment Data

Domain: Food/Nutrition Related History (FH)

Class: Food and Nutrient Intake (1)

Sub-Class: Energy Intake (1.1)

Sub-sub Class: Energy Intake (1.1.1)

» Record the *Total energy intake (FH 1.1.1.1)*: 1000 – 1200 kcal/day

Sub-Class: Food and Beverage Intake (1.2)

Sub-sub Class: Food Intake (1.2.2)

» Describe the *Amount of food (FH 1.2.2.1)*: unable to consume large meals

» Describe the *Types of food/meals (FH 1.2.2.2)*: convenience frozen meals

Sub-Class: Micronutrient Intake (1.6)

Sub-sub Class: Mineral/element intake (1.6.2)

» Describe the intake of *Sodium (FH 1.6.2.7)*: high

These data are new and should be contributed to the medical record.

Cardiology Key Nutrition Assessment Data

Domain: Food/Nutrition Related History (FH)

Class: Behavior (5)

Sub-Class: Social Network (5.5)

» Record *Ability to build and utilize social network (FH 5.5.1)*: should be encouraged due to patient's statement of not liking to eat alone.

Class: Physical Activity and Function (7)

Sub-Class: Nutrition-related ADLs and IADLs (7.2)

» Record the *Physical ability to complete tasks for meal preparation (FH 7.2.1)* is limited due to patient's stated inability to shop for food and cook.

Cardiology Key Nutrition Assessment Data

Domain: Anthropometric Measurements (AD)

Class: Body composition/growth/weight history (1.1)

» Record: *Height/length (AD 1.1.1)*: 5' 6"

Weight (AD 1.1.2): 135 lbs.

Weight change (AD 1.1.4): decrease of 20 lbs. over 2 months

Cardiology Key Nutrition Assessment Data

Domain: Biochemical Data, Medical Tests and Procedures (BD)

No information

Domain: Nutrition-Focused Physical Findings (PD)

No information

Cardiology Key Nutrition Assessment Data

Domain: Client History (CH)

- Class: Personal History (1)
  - Sub-Class: Personal Data (1.1)
    - » Record *Age (CH 1.1.1)*: 67 years old
    - » Record *Gender (CH 1.1.2)*: male
    - » Record *Ethnicity (CH 1.1.5)*: Hispanic
    - » Record *Language (CH 1.1.6)*: Spanish/English
- Class: Patient/Client/Family Medical/Health History (2)
  - Sub-Class: Patient/client OR family nutrition-oriented medical/health history (2.1)
    - » Record *Cardiovascular (CH 2.1.2)*: patient has medical diagnosis of heart failure in last 2 months, dyspnea
- Class: Social History (3)
  - Sub-Class: Social history (3.1)
    - » Record *Living/Housing situation (CH 3.1.2)*: patient living in apartment 4 blocks from Medical Center
    - » Record *Occupation (CH 3.1.6)*: retired engineer

Cardiology Key Nutrition Assessment Data

Domain: Comparative Standards (CS)

- Class: Energy Needs (1)
  - Sub-Class: Estimated energy needs (1.1)
    - » Record *Total energy estimated needs (CS 1.1.1)*: 1600 kcal/day to maintain weight
    - » Record *Method for estimating needs (CS 1.1.2)*: Mifflin St. Jeor equation with sedentary activity levels
- Class: Micronutrient Needs (4)
  - Sub-Class: Estimated mineral needs (4.2)
    - » Record *Sodium (CS 4.2.7)*: less than 2000 mg/day
- Class: Weight and Growth Recommendation (5)
  - Sub-Class: Recommended body weight/body mass Index/growth (5.1)
    - » Record *Recommended body mass index (BMI) (CS 5.1.2)*: 19 – 24.9

Case #2

Referral from Pediatric Clinic to RDN – request for RDN consultation for assistance with meal planning

8 year old white male child with Fe deficiency anemia

Step 1: gather data from medical records

Step 2: verify in patient interview

Step 3: complete nutrition history questionnaire

Step 4: Identify indicators and establish whether the data are within normal parameters using comparative standards

Case #2

Description of patient:

- 8 year old white male child
- allergies to eggs and peanuts
- diagnosed with Fe deficiency anemia
- growth recently slowed with current BMI at the 30th percentile (44th percentile one year ago)
- food history questionnaire indicates an intake of 1200 – 1500 kcal/day
- poor appetite
- food variety limited; intake of only 4 or 5 different foods.
- mother states he is more irritable and more fatigued than usual.

Mother requests assistance for planning bag lunches and other meals that will help her child gain weight.

Case #2: Identify Terms

Begin the process of identifying terms by asking the following questions:

- Which terms can be used to describe the data so that it can be extracted in the future?
- Which data are new vs. already existing in the medical record?
- What parameters or comparative standards can be used to evaluate the data?
- What additional data are needed to make a definitive nutrition diagnosis?

Pediatric Key Nutrition Assessment Data

Domain: Food/Nutrition Related History (FH)

Class: Food and Nutrient Intake (1)

Sub-Class: Energy Intake (1.1)

Sub-sub Class: Energy Intake (1.1.1)

» Record the *Total energy intake (FH 1.1.1.1)*: 1200 – 1500 kcal/day

Sub-Class: Food and Beverage Intake (1.2)

Sub-sub Class: Food Intake (1.2.2)

» Describe the *Types of food/meals (FH 1.2.2.2)*: takes lunch to school

» Describe the *Food variety (FH 1.2.2.5)*: limited to 4 or 5 different foods

These data are new and should be contributed to the medical record.

Pediatric Key Nutrition Assessment Data

Domain: Food/Nutrition Related History (FH)

Class: Knowledge/Beliefs/Attitudes (4)

Sub-Class: Food and nutrition knowledge/skill (4.1)

» Record the *Area and level of knowledge/skill (FH 4.1.1)*: Mother is asking for assistance in meal planning to achieve weight gain.

Sub-Class: Beliefs and Attitudes (4.2)

» Record the *Readiness to change nutrition-related behaviors (FH 4.2.7)*: Child is afraid to try new foods due to possible allergic reactions.

Class: Behavior (5)

Sub-Class: Mealtime Behavior (5.4)

» Record *Limited number of accepted foods (FH 5.4.9)*: Child will eat only 4 or 5 different foods.

Pediatric Key Nutrition Assessment Data

Domain: Anthropometric Measurements (AD)

Class: Body composition/growth/weight history (1.1)

» Record the following:

Height/length (AD 1.1.1):

4' 1", increase of 1"/one year (4'0" one year ago)

Weight (AD 1.1.2):

51.5 lbs.

Weight change (AD 1.1.4):

increase of 1.5 lbs. over one year (50.0 lbs. on year ago)

Growth pattern indices/percentile ranks (AD 1.1.6):

BMI for age, 30th percentile (44th percentile one year ago)

Pediatric Key Nutrition Assessment Data

Domain: Biochemical Data, Medical Tests and Procedures (BD)

No information

Domain: Nutrition-Focused Physical Findings (PD)

Class: Nutrition-focused physical findings (1.1)

Sub-Class: Overall findings (PD 1.1.1)

» Record *Asthenia (PD 1.1.1.1)*: lack of energy

Sub-Class: Digestive system (PD 1.1.5)

» Record *Decrease in appetite (PD 1.1.5.10)*: poor appetite

Pediatric Key Nutrition Assessment Data

Domain: Client History (CH)

- Class: Personal History (1)
  - Sub-Class: Personal Data (1.1)
    - » Record *Age (CH 1.1.1)*: 8 years old
    - » Record *Gender (CH 1.1.2)*: Male
    - » Record *Race (CH 1.1.4)*: White
    - » Record *Language (CH 1.1.6)*: English
- Class: Patient/Client/Family Medical/Health History (2)
  - Sub-Class: Patient/client OR family nutrition-oriented medical/health history (2.1)
    - » Record *Hematology/oncology (CH 2.1.7)*: patient has medical diagnosis of iron deficiency anemia

Pediatric Key Nutrition Assessment Data

Domain: Comparative Standards (CS)

- Class: Energy Needs (1)
  - Sub-Class: Estimated energy needs (1.1)
    - » Record *Total energy estimated needs (CS 1.1.1)*: 1672 – 2205 kcal/day
    - » Record *Method for estimating needs (CS 1.1.2)*: DRI for 8 year old with growth and low to very active Physical Activity Level (PAL)
- Class: Weight and Growth Recommendation (5)
  - Sub-Class: Recommended body weight/body mass Index/growth (5.1)
    - » Record *Desired growth pattern (CS 5.1.3)*: Increase of 2" – 3" height and 5 – 10 lbs. per one year.

Summary

In this presentation we have reviewed the nutrition assessment data and terminology for two case studies:

- A 67 year old Hispanic male with heart failure
- An 8 year old white male child with iron deficiency anemia and food allergies

Summary

This concludes the nutrition assessment tutorial.

Please proceed to the Nutrition Diagnosis Tutorial for the presentation of the development of the Nutrition Diagnosis and PES statement for both case studies.