Nutrition Care Process Tutorial

Module 7: Case Studies and Wrap Up

Academy of Nutrition and Dietetics

Nutrition Care Process Terminology
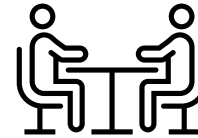2023 Edition

Objectives

➢ Review an Inpatient Setting Case Study

➢ Review an Outpatient Setting Case Study

Case Study: Inpatient

Nutrition Assessment: Gathering Relevant Data

67-year-old male with medical diagnosis of Congestive Heart Failure, diagnosed with pneumonia one month ago, but failed outpatient treatment. He is admitted to the medical floor of the hospital for further treatment. He is still experiencing dyspnea.

Client History:
- 67 y.o.
- Male
- Retired engineer and lives alone
- Medical diagnosis of Congestive Heart Failure

Anthropometric Data/Indicators:
- Height: 66"
- Weight: 135#
- Weight loss of 7# in the past 2 months due to reported lack of appetite from dyspnea

Nutrition Assessment: Gathering Relevant Data (continued)

Food and Nutrition Related History:
- Generally eats 3 meals/day
- Reported intake <75% of usual for the past 2 weeks
- Medications: Enalapril, Carvedilol, Chlorothiazide

Physical exam findings:
- Dyspnea
- Muscle wasting (mild) - temporal and clavicles
- Subcutaneous fat loss (mild) - orbital and triceps

Biochemical Data, Medical Tests and Procedures:
- Lab values unremarkable

Comparative Standards:
- Total energy estimated needs in 24 hours: 1600 kcals
- Method for estimating total energy needs: Mifflin St. Jeor, physical activity factor 1.2
- Total protein estimated needs in 24 hours: 74-92 gms (1.2-1.5gms/kg)

Nutrition Assessment: Review

During nutrition assessment, the RDN will:

✓ Review observed and measured data collected for factors that affect nutritional and health status

✓ Identify standards by which data will be compared

✓ Cluster relevant data elements to identify a nutrition problem/diagnosis

Nutrition Diagnosis: Potential PES Statements

1. Moderate acute illness related malnutrition related to inability to consume sufficient energy due to dyspnea (physiologic metabolic etiology category) as evidenced by 5% wt loss in 2 months and <75% of usual intake for the past 2 weeks, mild muscle wasting, and mild subcutaneous fat loss

2. Inadequate oral intake related to inability to consume sufficient energy due to dyspnea (physiologic metabolic etiology category) as evidenced by 5% wt loss in 2 months, <75% of usual intake for the past 2 weeks, mild muscle wasting, and mild subcutaneous fat loss

3. Unintended weight loss related to inability to consume sufficient energy due to dyspnea (physiologic metabolic etiology category) as evidenced by 5% wt loss in 2 months, <75% of usual intake for the past 2 weeks, mild muscle wasting, and mild subcutaneous fat loss

Nutrition Diagnosis: PES Statement Review

1. Moderate acute illness related malnutrition related to inability to consume sufficient energy due to dyspnea (physiologic metabolic etiology category) as evidenced by 5% wt loss in 2 months and <75% of usual intake for the past 2 weeks, mild muscle wasting, and mild subcutaneous fat loss.

Can the RDN resolve the problem?
a. Yes

Does the etiology address the root cause? Does it align with the assessment data?
a. Yes

Is there a reasonable intervention?
a. Yes

Can you monitor this client on the basis of the stated, quantifiable signs and symptoms?
a. Yes

Nutrition Diagnosis: PES Statement Review

2. Inadequate oral intake related to inability to consume sufficient energy due to dyspnea (physiologic metabolic etiology category) as evidenced by 5% wt loss in 2 months, <75% of usual intake for the past 2 weeks, mild muscle wasting, and mild subcutaneous fat loss.

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Nutrition Diagnosis: Prioritizing PES Statement

After prioritizing, review the impact the RDN can have on a nutrition problem.

This PES statement has an etiology or 'root cause' that the RDN can directly impact through planning an intervention and monitoring and evaluating the client's progress:

Moderate acute illness related malnutrition related to inability to consume sufficient energy due to dyspnea (physiologic metabolic etiology category) as evidenced by 5% wt loss in 2 months , <75% of usual intake for the past 2 weeks, mild muscle wasting, and mild subcutaneous fat loss.

Nutrition Intervention – Planning Phase

GOALS:

1. Weight maintenance within 5# of current weight until next RD visit;
2. Pt will consume greater than 75% of prescribed diet until next RD visit
3. Pt will consume at least 50% of high kcal/high protein nutritional supplement until next RD visit.

NUTRITION PRESCRIPTION:

1. Recommend general healthful diet to provide about 2000 kcals, 90 gms protein
2. Provide high calorie/high protein nutrition supplement of choice twice/day

Nutrition Intervention – Implementation Phase

PLAN:

1. Nursing staff will record intake of meals and supplements
2. Weigh pt 2x/week
3. Coordination of nutrition care

Evaluating the Nutrition Intervention

➢ The etiology (or root cause) from the PES statement drives the selection of the intervention

➢ If the RDN cannot resolve the problem by addressing the etiology, the RDN should aim to lessen the signs and symptoms with the nutrition intervention
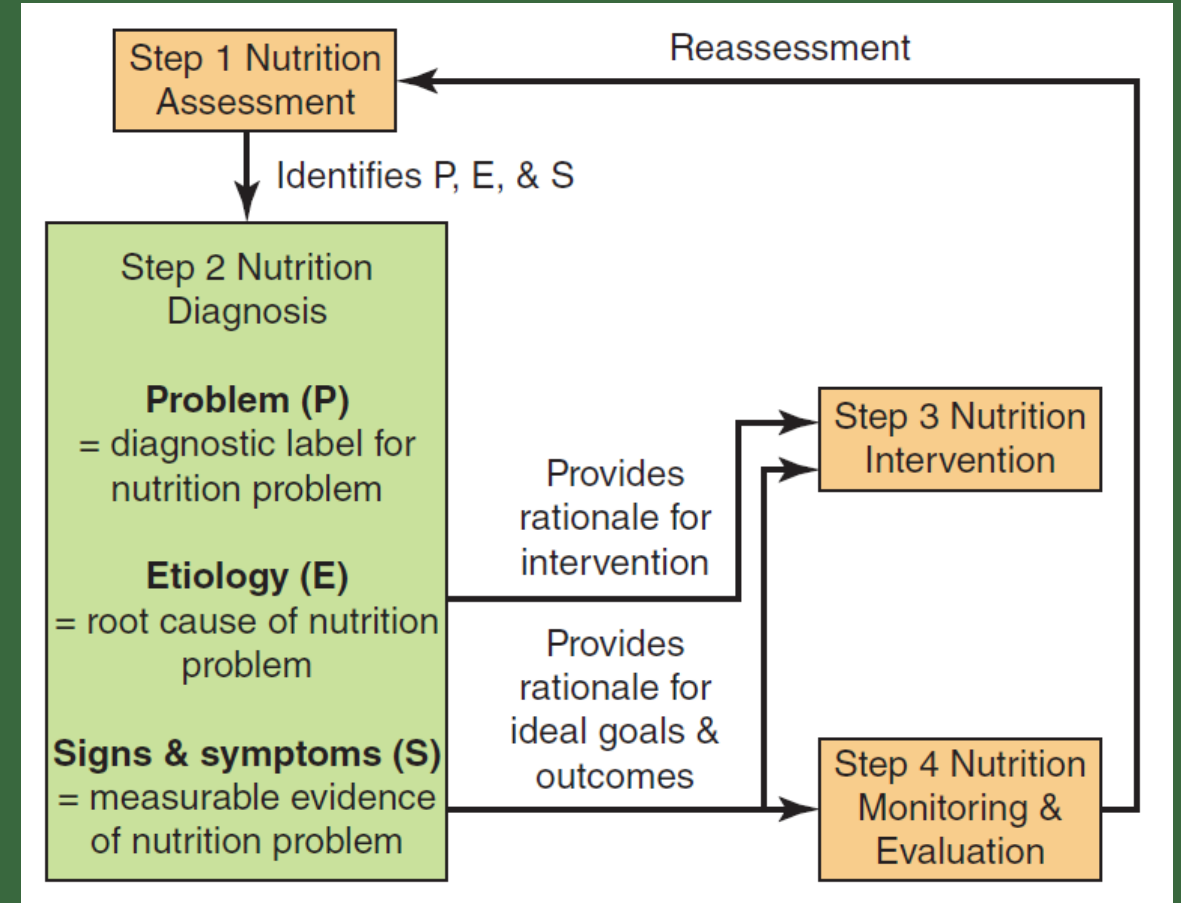
Nutrition Monitoring and Evaluation

✓ The signs and symptoms from your PES statement indicate what needs to be monitored & evaluated at future visits.

✓ This will help determine the efficacy of the nutrition intervention and determine if any adjustments are needed.

Nutrition Monitoring and Evaluation: Using Indicators and Criteria

Indicator: Measured weight
Criteria: Client's weight currently 135#; RD will monitor for weight changes at next visit

Indicator: Estimated intake in 24 hours
Criteria: Pt's estimated intake is <75% of usual; pt will be consuming >75% of meals at next visit

Indicator: Nutritional supplement intake
Criteria: Pt will be consuming 50% of at least nutritional supplements daily; RD will monitor intake at next visit

Nutrition Monitoring and Evaluation: Review

✓ Are you monitoring quantifiable outcomes

✓ Are the indicators appropriate based on the Nutrition Intervention and do they address the Nutrition Diagnosis?

✓ Are the indicators specific and measurable, including a time frame?

Case Study: Outpatient Setting

Nutrition Assessment: Gathering Relevant Data

67-year-old male with medical diagnosis of Congestive Heart Failure presenting with dyspnea is referred to the outpatient RDN upon discharge. This is his first time speaking with an RDN.

Client History:

- 67 y.o.
- Male
- Retired engineer and lives alone
- Diagnosed with pneumonia one month ago; still experiencing dyspnea

Anthropometric Data/Indicators:

- Height: 66"
- Weight: 135#
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Nutrition Assessment: Gathering Relevant Data (continued)

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NUTRITION PRESCRIPTION:

1. Recommend general healthful diet to provide about 1600 kcals, 90 gms protein
2. Recommend consumption of a high calorie/high protein nutrition supplement of choice twice/day

Nutrition Intervention – Implementation Phase

PLAN:

1. Nutrition Education: Content related nutrition education

   • Discussed estimated needs with client and the importance of adequate intake to prevent further weight loss.

   • Discussed ways to increase energy and protein intake and provided list of high calorie/high protein foods.

2. Encouraged client to consume 1-2 high calorie/high protein supplement daily.

3. Client to follow up with RDN in 4 weeks.

Nutrition Monitoring and Evaluation

✓ The signs and symptoms from your PES statement indicate what needs to be monitored & evaluated at future visits.

✓ This will help determine the efficacy of the nutrition intervention and determine if any adjustments are needed.

Nutrition Monitoring and Evaluation: Using Indicators and Criteria

Indicator: Measured weight
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Indicator: Nutritional supplement intake
Criteria: Pt will be consuming 50% of at least 1 nutritional supplement daily; RD will monitor intake at next visit

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✓ Are you monitoring quantifiable outcomes

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Summing It All Up

Nutrition Care Process

Assessment

Data you observe or collect

Diagnosis

The nutrition problem you determined from the data you observed

Intervention

How you fixed the problem using MNT or care coordination

Monitoring & Evaluation

What data you will monitor & evaluate when the patient returns for follow-up that will tell you if the nutrition problem is improving or resolved

Additional Reading and Resources

Colin C, Arikawa A, Cooper M, Lamers-Johnson E, Wright L, Papoutsakis C. Documentation of the evidence-diagnosis link predicts nutrition diagnosis resolution in the Academy of Nutrition and Dietetics' diabetes mellitus registry study: a secondary analysis of nutrition care process outcomes. *Front Nut*. 2023;10. https://doi.org/10.3389/fnut.2023.1011958

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Additional Reading and Resources (continued)

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