

Transcript

NCP 2023 Tutorial

Module 7

Welcome to Module 7 of the Nutrition Care Process Tutorial: The Case Studies and Final Wrap Up.

In this module, we will review an inpatient setting case study and we will also review an outpatient setting case study to see how the Nutrition Care Process Terminology can be applied in different care settings.

We'll begin by looking at our inpatient case study first. As we may now know, the first step of the nutrition care process is Nutrition Assessment or gathering the relevant data. For this case study, we have gathered the following data: this is a 67 year old male with a medical diagnosis of Congestive Heart Failure. He is diagnosed with pneumonia one month ago but failed outpatient treatment. He is now admitted to the medical floor of the hospital for further treatment. He is still experiencing thick dyspnea. So in terms of breaking this down by domain, we'll look first at the Client History. Client history includes the fact that he's 67 years old. He's a male. We also were able to find out that he was a retired engineer and lives alone. He carries a medical diagnosis of Congestive Heart Failure, prior to admission. We also look at his Anthropometric Data or indicators. He has a height of 66 inches, a weight of 135 lbs. And by talking to him, we know that he has had a weight loss of 7 lbs in the past two months due to a reported lack of appetite from his symptoms and disease.

We can also gather additional information about his Food and Nutrition Related history. By looking at this domain. From talking to him, we know that he generally eats three meals a day. However, his reported intake has been less than 75% of his usual intake for the past two weeks. His medications include Enalapril, Carvedilol, and Chlorothiazide. In doing a nutrition focused physical exam, the Physical Exam Findings are dyspnea, mild muscle wasting in his temporal and clavicle regions, and subcutaneous fat loss, which is mild in his orbital and triceps areas. In terms of Biochemical Data, Medical Tests, and Procedures, his lab values remain unremarkable at this point. Comparative Standards were used to measure his needs. His total energy estimated needs for 24 hours is 1600

calories. The method for estimating his total energy needs was the Mifflin St. Jeor, plus a physical activity factor of 1.2. His total protein estimated needs in 24 hours were 74 to 92 grams. This was using 1.2 to 1.5g per kilogram to prevent further muscle wasting.

During the nutrition assessment step, we know the RDN will review observed and measure data collected for factors that affect nutritional and health status, identify standards by which data will be compared and then cluster relevant data elements to identify a nutrition problem or a diagnosis that comes in the next step.

The next step is the Nutrition Diagnosis step or coming up with a PES statement. In this step, the Dietitian will think critically about the nutrition problem, the etiology or etiologies of this problem, and come up with potential PES statements and then prioritize by thinking about what is the true nutrition problem here?

Based on the nutrition assessment data gathered, one potential PES statement would be: Moderate Acute Illness Related Malnutrition related to an inability to consume sufficient energy due to dyspnea, which would be from the physiologic metabolic and etiology category, as evidenced by 5% weight loss in two months and less than 75% of usual intake for the past two weeks, mild muscle wasting, and mild subcutaneous fat loss. So in this case, for this PES statement, can the RDN resolve the problem? Yes. Does the etiology address the root cause? Does it align with the assessment data? Yes. Is there a reasonable intervention that could be planned? Yes. And can you monitor this client on the basis of the stated quantifiable signs and symptoms? Yes.

A second possible PES statement could be: Inadequate Oral Intake related to an inability to consume sufficient energy due to dyspnea from the physiologic metabolic etiology category, as evidenced by 5% weight loss in two months, less than 75% intake for the past two weeks, mild muscle wasting and mild subcutaneous fat loss. Can the RDN resolve this problem? Yes. Does the etiology address the root cause? Does it align with the assessment data? It does. Is there a reasonable intervention? Yes. And can you as RDN monitor this client based on the stated quantifiable signs and symptoms, which is also yes.

A third possible PES statement could be Unintended Weight Loss related to inability to consume sufficient energy due to dyspnea from the physiologic metabolic category as evidenced by 5% weight loss in two months, less than 75% of usual intake for the weeks

mild muscle wasting, and mild subcutaneous fat loss. In this case, can the RDN resolve the problem? Yes. Does the etiology address the root cause? Yes. Is there a reasonable intervention that can be planned based on this PES statement? Yes. And can you monitor this client on the basis of the stated quantifiable signs and symptoms?

The answer is yes.

So we reviewed 3 PES statements that all would be suitable as PES statements. So how does the RDN go about prioritizing which one to use or which ones to use? The RDN here would review the impact that they can have on each of these nutrition problems. They then think critically about the PES statement, and does it have an etiology or root cause that the RDN can directly impact through planning and intervention and then monitoring and evaluating the client's progress? In this case, the RDN prioritized Moderate Acute Illness Related Malnutrition as the diagnosis.

The next step in the Nutrition Care Process will be for the Dietitian to create a nutrition intervention or interventions. In this case, the Dietitian writes the following goals: Weight maintenance within 5 lbs of current weight until the next RDN visit. Also, that the patient will consume greater than 75% of their prescribed diet until the next RDN visit, and that the patient will consume at least 50% of a high calorie high protein nutrition supplement until the next RDN visit. The Dietitian also writes a Nutrition Prescription. In this case, the Dietitian writes that they recommend a general healthful diet to provide about 2000 calories and 90 grams of protein, which is a prescribable diet at this hospital, noting that it's a little bit above his estimated needs of 1600 calories per day. Also, to provide a high calorie, high protein nutrition supplement of choice two times a day for the patient.

The next step in terms of Nutrition Intervention is for the Dietitian to implement the intervention by creating a plan. In this case, the Dietitian writes the plan as the nursing staff will record intake of meals and supplements, that they will weigh the patient two times a week, and then there will be a coordination of nutrition care that involves both nursing and the Dietitian, and potentially The doctor to order the supplement depending on whether the institution has ordering writing privileges for the Dietitian.

Creating nutrition interventions, the Dietitian should always make sure that the etiology or root cause from the PES statement drives the selection of the intervention or interventions. If the Dietitian cannot resolve the problem by addressing the etiology,

they should at least be able to aim to lessen the signs and symptoms with a nutrition intervention or interventions that they choose.

Next step will be for the Dietitian to determine how they're going to monitor and evaluate the patient's progress towards the nutrition goals. The signs and symptoms from the PES statement indicate what needs to be monitored and evaluated at future visits. This will then determine the efficacy of the nutrition intervention and determine if any adjustments are needed.

In this case, the Dietitian sets up their nutrition monitoring and evaluation using indicators and criteria. Indicators are what is being monitored and the criteria is how it will be evaluated. In this case, the first indicator chosen is measured weight. The criteria is the patient's weight, currently at 135 lbs. The RDN will continue to monitor for weight changes at the next visit. The 2nd indicator chosen is estimated intake in 24 hours. The criteria is the patient's estimated intake is less than 75% of usual currently, but that the patient only be consuming greater than 75% of meals at the next visit. The last indicator is nutrition supplement intake. The criteria is that the patient will be consuming at least 50% of the prescribed nutrition supplements daily and that the RDN will monitor intake at the next visit.

When the Dietitian sets up nutrition monitoring and evaluation, they need to make sure of a few things: number one, are they monitoring quantifiable outcomes, are the indicators appropriate based on the nutrition intervention, and do they address the nutrition diagnosis directly, and are they indicators specific and measurable, including a time frame? In this case, the time frame was by the next RDN visit.

We will now move on to our second case study, which is a case study in an outpatient setting. It should be noted that for this second case study, this is a separate patient. This is not a continuation of the patient from the first case study. In this case, the Dietitian is meeting with a 67 year old male with a medical diagnosis of Congestive Heart Failure, who is presenting with dyspnea and is referred to an Outpatient Dietitian. This is his first time speaking with a Dietitian. In terms of Client History, the Dietitian collects the following information: he's 67 years old. He's a male. He's a retired engineer and lives alone, and he has a diagnosis of had a diagnosis of pneumonia one month ago and he is still experiencing some symptoms. His Anthropometric Data indicators are that he is

66 inches, his weight is 135 lbs and he's had a weight loss of 7 lbs in the past two months due to his reported lack of appetite from his dyspnea and other symptoms.

In terms of Food and Nutrition Related History, the Dietitian collects the following information: he generally eats three meals a day, he has a reported intake of less than 75% of usual for the past two weeks, and his medications include Enalapril, Carvedilol, and Chlorothiazide. Upon doing a nutrition focused physical exam, the Dietitian finds the following the patient or the client: he has dyspnea, muscle wasting in his temporal and clavicle regions, he has subcutaneous fat loss that's mild in his orbital and triceps regions. In terms of Biochemical Data, Medical Test, and Procedures, his lab values are unremarkable. In terms of Comparative Standards, total energy estimated needs in 24 hours is 1600 calories. The method for estimating this total energy needs is the Mifflin St. Jeor, with a physical activity factor of 1.2. His total protein estimated needs in 24 hours or 74 to 92 gm, which is based on 1.2 to 1.5g per kilogram per day, to help prevent further muscle wasting.

Similar to an inpatient setting, in an outpatient setting, the Dietitian during nutrition assessment will review observed and measure data collected for factors that affect nutritional and health status, identify standards by which data will be compared, and cluster relevant data elements to identify a nutrition diagnosis or problem in the next step.

Also similar to an inpatient setting, in an outpatient setting, the Dietitian will also come up with potential PES statements that address the nutrition problem in the nutrition diagnosis step.

One potential PES statement would be Moderate Acute Illness Related Malnutrition related to inability to consume sufficient energy due to dyspnea from the physiologic metabolic etiology category, as evidenced by a 5% weight loss in two months and less than 75% of usual intake for the past two weeks, mild muscle wasting, and mild subcutaneous fat loss. In this PES statement, the RDN can resolve the problem. They can address the etiology or the root cause, they can come up with reasonable interventions based on this nutritional diagnosis, and they can monitor this client based on the stated quantifiable signs and symptoms.

A second potential PES statement for this client would be: Inadequate Oral Intake related to an inability to consume sufficient energy due to dyspnea from the physiologic metabolic etiology category as evidenced by 5% weight loss in two months less than 75% of usual intake for the past two weeks, mild muscle wasting and mild subcutaneous fat loss.

A third potential PES statement for this client could be unintended weight loss related to inability to consume sufficient energy due to dyspnea from the physiologic metabolic category category, as evidenced by 5% weight loss in two months, less than 75% of usual intake for the past two weeks, mild muscle wasting and mild subcutaneous fat loss.

After prioritizing and thinking about these three potential PES statements that would all be suitable, the Dietitian then reviews the impact that they can have on the nutrition problem. In this case, the Dietitian prioritizes Moderate Acute Illness Related Malnutrition as the nutrition diagnosis for this client.

It's now time for the Dietitian to plan the nutrition intervention or interventions. In this case, the Dietitian with the client decide on the following goal: Weight maintenance within 5 lbs of the current weight until the next Dietitian visit, that the client will consume greater than 75% of a recommended diet until the next visit with the Dietitian, and that the client will consume at least 50% of a high calorie, high protein nutrition supplement until the next visit with the Dietitian. The Dietitian will also write a Nutrition Prescription. In this case, the Nutrition Prescription is: Recommended a general healthful diet provide about 1600 calories, with 90 grams of protein, and recommend consumption of a high calorie, high protein nutrition supplement of the client's choice twice a day.

The Dietitian and client then decide upon a plan. In this case, the plan includes nutrition education, which is content related nutrition education. The Dietitian documents that they discussed estimated needs with the client and the importance of adequate intake to prevent further weight loss. The Dietitian also documents that they discussed ways to increase energy and protein intake and provided a list of high calorie and high protein foods. The plan also includes encouraging the client to consume one to two high calorie, high protein supplements a day, and for the client to follow up with the Dietitian in four weeks.

It's now time for the Dietitian to decide on nutrition monitoring and evaluation using indicators and criteria. In this case, the Dietitian decides on the three indicators: Measured Weight, Estimated Intake in 24 hours, and Nutrition Supplement Intake. In order to evaluate indicator #1, the criteria will be client' weight, which is currently 135 lbs and the Dietitian will monitor for weight changes at the next visit. The 2nd indicator is Estimated Intake in 24 hours, with the criteria being that the client's estimated intake is less than 75% of usual at this point, and that the patient will be consuming greater than 75% of meals by the next visit. The last indicator is Nutrition Supplement Intake. The criteria here will be that the client will be consuming 50% of at least one nutrition supplement daily, and then the Dietitian will monitor this intake at the next visit as well.

When determining what to monitor and evaluate, the Dietitian always wants to make sure that they're monitoring for quantifiable outcomes and that the indicators are appropriate based on the nutrition intervention and that they address the nutrition diagnosis. They also want to make sure that the indicators are specific and measurable, including a time frame.

It's now time to sum up what we have learned and reviewed in the past seven modules. As we have learned, the Nutrition Care Process includes 4 unique and distinct steps including Assessment, Diagnosis, Intervention, and Monitoring and Evaluation. Nutrition Assessment includes the data that you observe or collect. In the Diagnosis Step, the nutrition problem is determined from the data that you have observed or collected during the assessment section. In the Intervention step, you are looking how to fix the problem that you have determined in the Nutrition Diagnosis step using medical nutrition therapy or care coordination. The Monitoring and Evaluation step is comprised of what data you will monitor and evaluate when the patient or client returns for follow up that will tell you if the nutrition problem is improving or has resolved.

Additional reading on the Nutrition Care Process and Nutrition Care Process Terminology can be found in these articles and resources.

In addition to these articles and resources.

Special recognition and acknowledgement for the creation of these tutorials go out to our module presenters, the Nutrition Care Process Terminology Board of Editors, and the Academy of Nutrition and Dietetics Nutrition Care Process and Terminology Committee.

To learn more about the Nutrition Care Process and to subscribe to the electronic version of the Nutrition Care Process Terminology, please visit www.nutritioncareprocess.org.