

# NUTRITION CARE PROCESS



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# OBJECTIVES FOR THIS PRESENTATION

- To gain a working knowledge of the NCP
- To understand the 4 steps of the NCP
- To familiarize the audience with the ADIME method of documentation
- To facilitate the use of the NCP in the Dialysis setting
- Practice scenarios



# ACADEMY'S GOALS FOR DEVELOPMENT OF NCP

- Nutrition Care Model Workgroup was created in 2002
- Promoting the demand for nutrition professionals
- Help professionals be more competitive in the workplace by developing a standardized language
- Improve the consistency and quality of care for patients/clients and groups
- Improve the predictability of patient/client outcomes



# DEVELOPMENT OF NCP

- Nursing terminology was developed in the 1970's-outlines nursing diagnoses, intervention and outcomes or goals.
- PT and OT share similar formats.
- The NCP is not intended to standardize nutrition care for each patient/client but to establish a standardized process for providing care



# NUTRITION CARE PROCESS-4 DISTINCT STEPS

- Nutrition Assessment-process of obtaining, verifying, and interpreting collected data.



- Nutrition Diagnosis-identifies and labels an actual nutrition problem, risk of, or potential for developing a nutrition problem.



# NUTRITION CARE PROCESS-4 DISTINCT STEPS

- Nutrition Intervention-specific actions used to remedy and nutrition diagnosis/problem. Can be used with individuals or groups.
- Nutrition Monitoring and Evaluation- Used to quantify progress made by the patient/client in meeting nutrition care goals. **YOU ARE SETTING GOALS AND ASSESSING WHETHER THE GOALS WERE MET.**



# BENEFITS OF NUTRITION CARE PROCESS

- Provides a standardized language for all dietetic professionals.
- Provides an agreed upon mechanism by which we can all communicate client info.
- Provides us with a method to reliably measure outcomes or goals.
- Increases the predictability of those outcomes or goals.



# NUTRITION ASSESSMENT-STEP ONE

## ○ Purpose:

- Obtain, Verify and Interpret data.
- Make decisions about the nature and cause of suspected nutrition related problems.
- Assess Nutrition Risk.
- Food and Nutrition Professional determines whether a nutrition diagnosis/problem exists from the data collected in this step.





# NUTRITION ASSESSMENT CATEGORIES

- Client history
- Anthropometric history and measurements
- Biochemical history, medical tests and procedures
- Nutrition Focus Physical Findings
- Food/ Nutrition-related history
  
- These are the categories in which we collect data for the Nutrition Assessment.



# NUTRITION DIAGNOSIS-STEP TWO



## ○ Purpose:

- Identify and label the nutrition diagnosis/ problem.
- Describe nutrition diagnoses/problems consistently to provide clarity within and outside the profession.
- A statement that reflects what was found in the assessment.
- NOT A MEDICAL DX, A NUTRITION DX!



# NUTRITION DIAGNOSIS

- Nutrition Diagnosis can change as the patient's response to intervention changes.
- Divided into 3 domains within which the nutrition diagnoses/problems fall:
  - Intake Domain
  - Clinical Domain
  - Behavioral-environmental Domain
- Can use “no nutrition diagnosis”



# NUTRITION DX-INTAKE DOMAIN

- Nutrition diagnoses/Problems related to intake of energy,nutrients,fluids through oral diet or nutrition support
  - Divided into classes
    - Energy balance
    - Oral or Nutrition support intake
    - Fluid intake
    - Bioactive substance intake
    - Nutrient intake
    - Macronutrient intake
    - Micronutrient intake



# NUTRITION DX-CLINICAL DOMAIN

- Nutritional findings/problems identified that relate to medical or physical conditions.
  - Functional
  - Biochemical
  - Weight



# NUTRITION DIAGNOSIS- BEHAVIORAL/ENVIRONMENT DOMAIN

- Nutritional findings/problems identified that relate to knowledge, attitudes/beliefs, physical environment, access to food and food safety.
  - Knowledge and beliefs
  - Physical activity and function
  - Food safety and access



# WRITING NUTRITION DIAGNOSIS STATEMENTS

## ○ PES FORMAT

- Problem(P)-some alteration in nutritional status
- Etiology(E)-cause or contributing risk factors “related to”
- Signs/symptoms(S)-defining characteristics of the problem “As evidenced by”



# INTAKE DOMAIN EXAMPLE

- Problem—Etiology(“related to”)--- (“As evidenced by”)--- Signs and symptoms
  - “Excessive Mineral(po4) intake related to Overconsumption of a limited variety of foods(consumption of dairy and nuts) as evidenced by serum po4 of 7.5”
  - Excessive fluid intake related to consumption of high sodium food producing excessive thirst as evidenced by IDWG’s consistently above 5% of dry weight, pedal edema and SOB when presenting to dialysis.





# CLINICAL DOMAIN EXAMPLE

- Problem—Etiology(“related to”)--- (“As evidenced by”)--  
- Signs and symptoms

Involuntary weight loss related to prolonged catabolic illness as evidenced by weight loss of 5% in 30 days

Swallowing difficulty related to dx of CVA as evidenced by coughing, choking, pouching of food on swallow evaluation



# BEHAVIORAL/ENVIRONMENTAL DOMAIN EXAMPLE

- Problem—Etiology(“related to”)--- (“As evidenced by”)--- Signs and symptoms
- Food and Nutrition-related knowledge deficit related to no prior knowledge of renal diet concepts as evidenced by pt newly dx’d with CKD Stage 5.
- Limited adherence to nutrition-related recommendations related to lack of value for behavior change/ not taking Po4 binding medications as evidenced by po4 consistently above 7.0



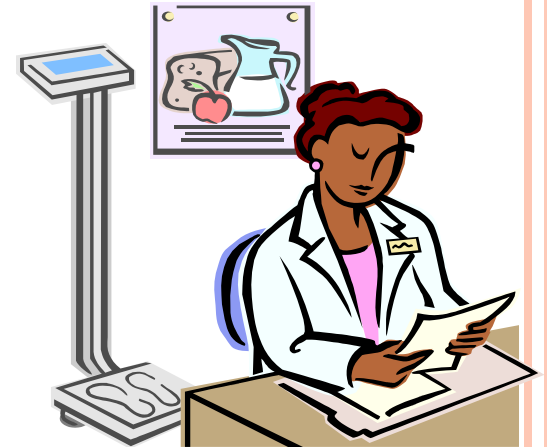
# NUTRITION DIAGNOSIS WORKSHEET

- Nutrition Diagnosis Label
- Definition of Nutrition Diagnosis Label
- Etiology-cause or contributing factors
- Signs/symptoms-defining characteristics



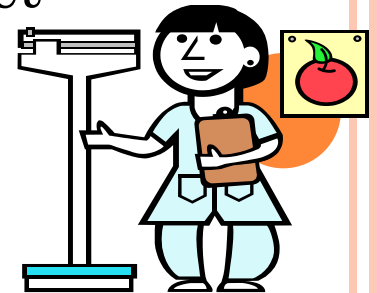
# ORGANIZATION OF DATA IN SIGNS/SYMPTOMS

- Classified by nutrition assessment categories
  - Biochemical data
  - Anthropometric
  - Physical exam
  - Food and Nutrition history
  - Client history



# NUTRITION INTERVENTION- STEP THREE

- Plan the Nutrition Intervention to address the identified diagnosis
  - Prioritize diagnoses
  - Establishing goals and patient focused expected outcomes for each DX
  - Define the nutrition prescription and select specific nutrition interventions



# RELATIONSHIPS

- The Intervention is aimed at the etiology of the Nutrition DX PES statement.
- Sometimes the Intervention may be directed at the signs and symptoms in the PES statement.



# RELATIONSHIPS

Assessment      Diagnosis      Intervention      Monitor/Eval

Problem

Etiology

Signs/Symptoms

Sample: Excessive Mineral(po4) intake related to overconsumption of a limited variety of foods(consumption of dairy and nuts) as evidenced by serum po4 of 7.5



# NUTRITION INTERVENTION DOMAINS

- Food and/or Nutrient delivery
  - Nutrition Education
  - Nutrition Counseling
  - Coordination of Nutrition Care
- 
- None of this is new to us; Just the use of different terminology





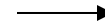
# NUTRITION MONITORING AND EVALUATION-STEP FOUR

- Purpose is to determine the progress made by the patient/client in meeting the stated goals
- Determine the indicator that you are measuring(this is determined by the DX)
- Indicators can be compared to established criteria
- Monitoring the Patient/Client progress by determining whether the nutrition intervention is being implemented and that it is working to change the behavior or nutritional status



# RELATIONSHIPS

○ Assessment      Diagnosis      intervention      monitor/eval



○ Problem                      etiology                      signs and symptoms



- Nutrition monitoring and evaluation answers the question: Is the nutrition intervention strategy working to resolve the nutrition diagnosis, its etiology and/or signs and symptoms??



# NUTRITION MONITORING AND EVALUATION TERMINOLOGY

- Combined with the Nutrition Assessment terms:
  - Food and Nutrition related History
  - Anthropometric Measurements
  - Biochemical Data, Medical tests and procedures
  - Nutrition-Focused Physical Findings

No Outcomes associated with Client History; these do not change as a result of Nutrition Intervention



# RENAL EXAMPLES

## ○ Outcome indicator

- Po4 intake

## ○ Criteria

- Will limit dairy to twice per week,  $\frac{1}{2}$  cup serving.
- Will limit nuts to 1oz per week.
- Will increase po4 binder when consuming dairy and nuts.
- Serum po4 will be  $<5.5$  in two months.



# RENAL EXAMPLE

- Outcome Indicator

- Weight

- Criteria

- Will consume one can of high kcal high protein nutritional supplement per day
- Will gain 1-2 pounds per month until reaching goal weight



# NUTRITION DOCUMENTATION

- Document each step of NCP-ADIME or ADI(monitor and eval included in intervention)
- NCP is not dependent on any specific form of documentation
- You can use nutrition diagnostic and intervention terminology in any style of charting(narrative, SOAP or ADI)



# LET'S PRACTICE WITH DEVELOPING NUTRITION DIAGNOSES

- A Patient's renvela prescription is 3 with each meal. On monthly labs his Po4 is 8.5. You review his diet and he is not consuming a lot of high po4 foods but he tells you that he is only taking 1 renvela per meal because he does not like taking 3.
- **What would be an appropriate Nutrition DX?**



- Altered Nutrition Related Lab value( PO4) related to non-adherence to binder prescription as evidenced by Po4 of 8.5 and patient report
- Limited adherence to nutrition related recommendations related to lack of value for behavior change as evidenced by PO4 of 8.5 and pt report





- Long standing patient who is generally compliant with recommendations loses her husband and tells you her appetite is gone, and doesn't feel like eating. You take a recall and see that she is only eating about 500 kcals and 15 gms of protein per day, well below her needs. The Social Worker reports the pt stated she is very depressed.
- **What is the Nutrition DX?**



- Inadequate Protein-energy intake related to depression from the death of her husband as evidenced by intake of 500 kcal and 15 gms of pro(\_\_\_\_% of needs) and reported lack of interest in food.



- A patient's k comes back at 6.8. The patient admits to eating a lot of summer fruit(cantaloupe, honeydew), eating tomatoes, potatoes and has been snacking on chips and guacamole every day.
- **What is the Nutrition DX?**



- Excessive mineral intake(K) related to overconsumption of high k foods( you can list them if you want) as evidenced by k of 6.8 on monthly labs.



- One of your previously well nourished nursing home patients has developed a pressure ulcer in the sacral area after a hospitalization for pneumonia. The pt has lost about 5% of her BW in 3 months and now has an albumin of 3.2 down from 3.9.
- **What is the Nutrition DX?**



- Increased nutrient needs (Protein) related to increased demand for protein for wound healing as evidenced by stage 2 sacral wound, alb of 3.2 and wt loss of 5% in 3 months.



# SIMPLE EXAMPLE OF AN ADIME NOTE

- Patient: 50 yo male with CKD 5 due to PCKD

## ASSESSMENT

Client Hx- diagnosed with PCKD at age 30, first ICDH today. Medical HX includes HTN. HD prescription: TIW, 4 hours on Revaclear dialyzer, 2k, 2.5 Ca bath. Meds include: Lopressor, multivitamin, Hectorol inceneter 4mcgs and Epo in center 4000 units per treatment.

Works as a HS Principal

Anthropometrics- Ht-5/1, Wt-79.5 kgs dry wt-79.5kgs BMI=24.6, no recent wt change. IBW/SBW, IDWG's=1-2 kgs.



# NOTE CONTINUED

Biochemical- All labs at goal except for  
Po<sub>4</sub>=7.5

Physical exam- well nourished appearing male,  
skin intact, alert and oriented

Food and Nutrition History- Good Appetite, slight  
nausea in the am. 3 meals with snacks in the afternoon and  
evening. Kcal and protein appear adequate in 24 hour recall.  
Snacks on cheese, yogurt and nuts daily. Received nutrition  
education from hospital RD with written material on the  
renal diet provided.

States snacking on nuts and dairy because he thought they  
were healthy and hospital RD did not mention PO<sub>4</sub> control.

Kcal needs\_\_\_\_\_ Protein needs\_\_\_\_\_





# NOTE CONTINUED

## ○ NUTRITION DIAGNOSIS

- Excessive Mineral(po4) intake related to Overconsumption of a limited variety of foods(consumption of dairy and nuts) as evidenced by serum po4 of 7.5

## NUTRITION INTERVENTION

Nutrition Prescription:2500kcal, 95 gms protein, 2000mgs K, 2000mgs NA, 1020 mgs Po4, 1500 mls fluid

1. Goal: Improved understanding and adherence to Po4 restrictions to maintain serum levels
  1. Intervention:Comprehensive education: Po4 control



# MONITORING AND EVALUATION

## ○ Outcome indicator:

- Po4 intake

## ○ Criteria

- Will limit dairy to twice per week,  $\frac{1}{2}$  cup serving.
- Will limit nuts to 1oz per week.
- Will increase po4 binder when consuming dairy and nuts.
- Serum po4 will be  $<5.5$  in two months.



# REFERENCES

- *International Dietetics and Nutrition Terminology (IDNT) Reference Manual*, Academy of Nutrition and Dietetics, 2013.
- Byham-Gray L; Stover J; Wiesen K. editors. Academy of Nutrition and Dietetics. *A Clinical Guide to Nutrition Care in Kidney Disease 2<sup>nd</sup> edition*. 2013.

