

Pacific West Distance Learning Network  
Nutrition for Children with Special Health Care Needs Curriculum

## **Group Study Module 4: Evaluating Nutrition Care Plans**

### Module Objectives and Activities

#### Learning Objectives

After completing the module, the participant will have the knowledge and skills to:

1. Critically evaluate the development of nutrition interventions, describe strengths and weaknesses of specific plans
2. Develop alternative strategies for weak nutrition intervention plans
3. Determine appropriate mechanisms for nutrition follow-up in terms of funding, location and personnel

#### Outline of Activities


Introduction of the module

- ❑ Review handout packet materials with the group leader
- ❑ Learning objectives and outline of activities
- ❑ PowerPoint slide handout
  - A. Discuss state and local resources
  - B. Discuss case studies
    1. Sheldon
    2. Justin
    3. Carla
    4. Aaron
- ❑ Post-test
- ❑ Evaluation form
- ❑ Certificate of completion
- ❑ Thank you for participating!

Pacific West Distance Learning Network  
Nutrition for Children with Special Health Care Needs Curriculum  
**Group Study Module 4: Evaluating Nutrition Care Plans**  
Presentation Notes


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Nutrition for Children with Special Health Care Needs  
**Module 4: Evaluating Nutrition Care Plans**



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**Pacific West MCH  
Distance-Learning Curricula**

- Nutrition for Children with Special Health Care Needs - 6 self-study modules
- Nutrition for Children with Special Health Care Needs - 4 group study modules (this presentation is one of them)
- Nutrition and Oral Health Curriculum all available (free) on-line at **[www.pacificwestmch.org](http://www.pacificwestmch.org)**



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**Group Study Curriculum**

Module 1: Providing Family-Centered Care  
Module 2: Participating in the Interdisciplinary Approach to Feeding Interventions  
Module 3: State and Local Nutrition Resources  
Module 4: Improving Nutrition Interventions



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## Module 4: Evaluating Nutrition Care Plans

Activities:

- Video example of interdisciplinary intervention
- Review process of nutrition assessment and intervention planning
- Evaluate appropriate intervention plans and outcome measures
- Discussion regarding follow up and measurement of intervention outcomes




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## Learning Objectives

After completing the module, participants will have the knowledge and skills to:

- Critically evaluate the development of nutrition interventions
- Develop alternative strategies for weak nutrition intervention plans
- Determine appropriate mechanisms for nutrition follow-up




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## The Process of Developing a Nutrition Care Plan

- **Decide on Nutrition Outcomes**  
(assessment to identify problems)
- **Develop Nutrition Interventions**  
(to address identified problems)
- **Determine Outcome Measures**  
(appropriate to specific interventions)




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## The Process

- Screening
- Assessment
  - Anthropometrics
  - Biochemical
  - Clinical/Medical
  - Dietary/Feeding
- Intervention
- Evaluation




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## The Process:

### Assessment

- Anthropometrics →
- Biochemical
- Clinical/Medical
- Dietary/Feeding

How does the condition affect:

- Growth potential?
- Body composition
- Risk of over/under- weight

Are the effects on growth nutrition-related or non-nutritional?

Do any medications have the potential to affect growth? Weight gain?




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## The Process:

### Assessment

- Anthropometrics
- Biochemical →
- Clinical/Medical
- Dietary/Feeding

Does the condition affect biochemical markers?

Do medications affect biochemical markers?

Does the condition require special biochemical monitoring?




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## The Process:

### Assessment

- Anthropometrics
- Biochemical
- Clinical/Medical →
- Dietary/Feeding

Are there any secondary conditions that might affect nutritional status (e.g., constipation, malabsorption)?

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## The Process:

### Assessment

- Anthropometrics
- Biochemical
- Clinical/Medical
- Dietary/Feeding →

Does the condition affect nutrient needs?

(Energy, other macronutrients; vitamins, minerals; fluid)

Does the condition affect ability to eat?

(Positioning, oral-motor skills, coordination, need for different portion size, acceptance of food, meal duration, social interaction)

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## The Process:

Intervention = ACTION = What will be done differently?

- Individualized
- Specific
- Outcome-based
- Family centered

**Example:** Family will offer energy-dense foods at meal and snack times

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## Interventions

Effective interventions specify:

- **What** will be done
- **How** it will be carried out
- **Who** will do it
- **When** it will happen
- **Where** it will happen (when appropriate)

Family will offer 2 foods with crunchy textures at each meal




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## Evaluation

Outcome = RESULTS = What will happen as a result of the intervention?

- Measurable
- Specific
- Evaluated

Example: Weight-for-age between the 10<sup>th</sup> and 50<sup>th</sup> percentiles




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## Evaluation

Outcome = RESULTS = What will happen as a result of the intervention?

- Long-term (adequate calcium intake)
- Short-term (re-gain of weight lost during an acute illness)




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 **Examples**

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 **Sheldon**


Sheldon is a 9-month old with Prader-Willi syndrome.

Assessment identifies that:

- Wt/age, length/age, weight/length are <5<sup>th</sup> %ile
- Wt/age was ~10<sup>th</sup> %ile until 6 weeks ago, when he was ill

GOAL (desired outcome):

- Sheldon's weight-for-age will increase.

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 **Sheldon**

Sheldon is a 9-month old with Prader-Willi syndrome.

IMPROVED GOAL:

- Sheldon's weight-for-length will increase to 5-10<sup>th</sup> percentile in 6 weeks.

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## Sheldon

GOAL: Sheldon's weight-for-length will increase to 5-10<sup>th</sup> percentile in 6 weeks.

INTERVENTION (action):

- Sheldon's family will offer infant formula that is concentrated.




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## Sheldon

GOAL: Sheldon's weight-for-length will increase to 5-10<sup>th</sup> percentile in 6 weeks.

IMPROVED INTERVENTION:

- Sheldon's family will offer infant formula that is concentrated to provide 24 kcal/oz. Sheldon's family will receive a written recipe for this special formula.




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## Carla: Desired outcomes

Carla is a 2-year old with cerebral palsy

Assessment indicates that:

- Oral-motor delays interfere with eating
- Weight gain has slowed over past few months
- Labs indicate that she is malnourished

- Carla will be well-nourished
- Carla's feeding problems will be addressed




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## Carla: Measurable Outcomes

Carla is a 2-year old with cerebral palsy

- Oral-motor delays interfere with eating
- Weight gain has slowed over past few months
- Labs indicate that she is malnourished

- Carla will be well-nourished
- Carla's feeding problems will be addressed



- Carla's prealbumin will be in the normal range in 6 weeks
- Carla's weight-for-length will be  $\geq 10^{\text{th}}$  percentile in 6 months




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## Carla: Measurable Outcomes

Carla is a 2-year old with cerebral palsy

- Oral-motor delays interfere with eating
- Weight gain has slowed over past few months
- Labs indicate that she is malnourished

- Carla will be well-nourished
- Carla's feeding problems will be addressed



- Carla will be referred to a feeding therapist by her next clinic visit




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## Carla: Designing Interventions

Outcomes:

- prealbumin will be in the normal range in 6 weeks
- weight-for-length will be  $\geq 10^{\text{th}}$  percentile in 6 months
- Referral to feeding therapist by next clinic visit

Interventions: need to be designed to achieve the measurable outcome




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## Carla: Specific Interventions

### Outcomes:

- prealbumin will be in the normal range in 6 weeks
- weight-for-length will be  $\geq 10^{\text{th}}$  percentile in 6 months
- Referral to feeding therapist by next clinic visit

### Interventions:

- One food with added energy and protein will be offered at each meal and snack
- RD will contact Carla's PCP to initiate referral




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## Carla: Evaluating Progress

- Prealbumin will be in the normal range in 6 weeks
  - Blood drawn: prealbumin was in the normal range
  - Outcome modified: prealb, albumin WNL in 6 mos
- Weight-for-length  $\geq 10^{\text{th}}$  percentile in 6 months
  - Weight-for-length 10th percentile
  - Outcome modified: weight/age 5<sup>th</sup>-25<sup>th</sup> %iles, length/age 10<sup>th</sup>-50<sup>th</sup> %iles, weight/length 10<sup>th</sup>-50<sup>th</sup> %iles
- Referral to feeding therapist by next clinic visit
  - Carla's mother reported that referral made
  - Outcome modified: Carla will receive feeding therapy




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## Aaron: Desired Outcomes

Aaron is an 8-year old with Down syndrome. In 9 months, Aaron has gained 7 kg. BMI-for-age is at the 95<sup>th</sup> %ile

- Aaron will maintain a healthy weight




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## Aaron: Measurable Outcomes

Aaron is an 8-year old with Down syndrome. In 9 months, Aaron has gained 7 kg. BMI-for-age is at the 95<sup>th</sup> %ile

➤ Aaron will maintain a healthy weight



▪ Aaron will maintain his current weight (32 kg) until his BMI-for-age is at the 75<sup>th</sup> %ile



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## Aaron: Interventions

Aaron will maintain his current weight (32 kg) until his BMI-for-age is at the 75<sup>th</sup> %ile

➤ Aaron will eat foods with fewer kilocalories



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## Aaron: Improved Interventions

Aaron will maintain his current weight (32 kg) until his BMI-for-age is at the 75<sup>th</sup> %ile

- Aaron's family will substitute foods with fewer kilocalories for energy-dense foods (specific information provided to Aaron's family).
- Aaron will walk to school with his older brother 3 days each week



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## Justin



- 18 month old with trisomy 21 (Down syndrome)
- Growth is appropriate
- Feeding skills are delayed
- Receives OT, SLP services




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## Justin: Feeding skills



- Give mother a handout about feeding skill development
- Suggest the family be seen by a feeding therapist
- Suggest that the OT and SLP also work on feeding skills




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## Justin: Improved Interventions

- Review feeding skill development handout with mother
- Identify where Justin is and what skills to reinforce
- OUTCOME: Identify desired feeding skills and strategies family can use
- Give mother a handout about feeding skill development
- Suggest the family be seen by a feeding therapist
- Suggest that the OT and SLP also work on feeding skills




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## Justin: Improved Interventions

- Give mother a handout about development of feeding skills
- Make a referral to a community feeding team at an early intervention center
- OUTCOME: appointment will be scheduled
- Suggest the family be seen by a feeding therapist
- Suggest that the OT and SLP also work on feeding skills




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## Justin: Improved Interventions

- Contact OT and SLP to discuss a plan to address Justin's feeding skills
- OUTCOME: RD, OT and SLP will develop list of feeding-related recommendations for Justin before next nutrition appointment
- Give mother a handout about development of feeding skills
- Suggest the family be seen by a feeding therapist
- Suggest that the OT and SLP also work on feeding skills




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## Justin



- Goals for nutrition therapy:
- Maintain adequate intake and appropriate growth
  - Improve feeding skills
  - Prevent overweight




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 Further thought...

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 Conclusion

- Resource sheet
- Post-test and evaluation

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# Pacific West Distance Learning Network Nutrition for Children with Special Health Care Needs Curriculum

## Group Study Module 4: Evaluating Nutrition Care Plans Resources

**Providing nutrition services for infants, children, and adults with developmental disabilities and special health care needs.** Cloud, HH, Posthauer, ME, *Providing Nutrition Services for Infants, Children and Adults with Developmental Disabilities and Special Health Care Needs*, J Am Diet Assoc 2004; 104(1): 97-107. This position paper documents why nutrition services are essential and gives factors to consider when providing and planning nutrition services. It is available online at [http://www.eatright.org/Member/PolicyInitiatives/index\\_21019.cfm](http://www.eatright.org/Member/PolicyInitiatives/index_21019.cfm).

**Pediatric Manual of Clinical Dietetics.** Nevin-Follino N, ed. *Pediatric Manual of Clinical Dietetics, 2e*. American Dietetic Association. 1998. This diet manual provides practice guidance for the nutrition care of pediatric patients. The manual is available through ADA's on-line catalog: [http://www.eatright.org/Public/ProductCatalog/SearchableProducts/104\\_8444.cfm](http://www.eatright.org/Public/ProductCatalog/SearchableProducts/104_8444.cfm).

**Self-Assessment Series: Nutrition Care Planning to Accomplish Desired Outcomes.** American Dietetic Association. This self-study module includes interactive hypothetical scenarios to assess and advance skills in planning for nutrition care. Case studies presented include preschooler who drops significantly on the growth chart. The module is available through ADA's on-line catalog: <http://www.eatright.org>.

**Self-Assessment Series: Implementing Nutrition Care Plans and Programs.** American Dietetic Association. This self-study module includes practice situations to advance skills in implementing nutrition care plans and programs. The cases include a teenager with gluten-sensitive enteropathy and a dietitian implementing a corporate wellness program. The module is available through ADA's on-line catalog: <http://www.eatright.org>

**Self-Assessment Series: Evaluating Nutrition Care Plans and Programs.** American Dietetic Association. This module is made up of simulated practice cases, including an infant admitted for cyanotic episodes, failure-to-thrive, and apnea. The module is available through ADA's on-line catalog: <http://www.eatright.org>.

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## Nutrition for Children with Special Health Care Needs Curriculum

### **Group Study Module 4: Evaluating Nutrition Care Plans**

#### Post-Test

Circle all of the appropriate response(s) to each question.

1. Which of the following is an appropriate intervention/action plan?
  - a) Jorge will be well nourished.
  - b) Jorge will gain three pounds.
  - c) Jorge's weight for height will be maintained between the 10<sup>th</sup> and 25<sup>th</sup> %ile.
  - d) Jorge will be given 3 cans of Pediasure daily.
  
2. Which of the following is considered an outcome measure?
  - a) weight/height
  - b) motivation of client
  - c) dietary compliance
  - d) attendance at therapy appointments
  
3. Which of the following demonstrates appropriate wording for a nutrition care plan long-term goal?
  - a) Brigette will maintain a healthy weight.
  - b) Brigette will maintain a BMI between the 50<sup>th</sup>-75<sup>th</sup> %ile for her age.
  - c) Brigette will not gain any weight for the next six months.
  - d) Brigette will avoid eating fried foods.



# Pacific West Distance Learning Network Nutrition for Children with Special Health Care Needs Curriculum

## Group Study Module 4: Evaluating Nutrition Care Plans Evaluation

**Please tell us about your experience:**

Format and Design	Strongly Agree				Strongly Disagree
The written materials supported the presentation well	5	4	3	2	1
The group dynamic helped me to absorb the content	5	4	3	2	1
The PowerPoint presentation was helpful to my understanding	5	4	3	2	1
The way the materials were organized made sense to me	5	4	3	2	1
The format enhanced my understanding of the content.	5	4	3	2	1
The speaker/lecturer delivered the content well	5	4	3	2	1
<b>What organization or format changes would have improved this presentation?</b>					
Content	Strongly Agree				Strongly Disagree
The materials covered met the stated objectives	5	4	3	2	1
What I learned today is relevant to my clinical practice	5	4	3	2	1
The clinical examples provided were					
• consistent with what a clinician might encounter in practice	5	4	3	2	1
• illustrated the points presented in the module	5	4	3	2	1
Effect on Practice					
I can think of recent instances where this information would have been useful to my clinical practice	5	4	3	2	1
I plan to use this resource in my practice	5	4	3	2	1
I would recommend this curriculum to my peers	5	4	3	2	1

**Please describe one aspect that, if changed, would improve the program:**

**Overall comments:**

**What is your discipline or area of expertise?**

Early Intervention

Education

Health Administration

Health Education

Nursing

Nutrition

Parent/ Family/ Consumer Resources

Other: \_\_\_\_\_

**Which category best describes you?**

Student

Person with a disability

Parent

Paraprofessional

Policymaker

RD

DTR

Other: \_\_\_\_\_

**Which of the following describes your place of employment or agency:**

For profit agency

County/ state agency

Federal agency

Foundation

General public

Hospital

Interagency group

Legislative body

Community organization

Academic institution

Other: \_\_\_\_\_

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**Group Study Module 4: Evaluating Nutrition Care Plans**

Certificate of Attendance

Individual Copy

**Continuing Professional Education**  
*Certificate of Attendance*

Nutrition for Children with Special Health Care Needs:  
Session Title: **Evaluating Nutrition Care Plans**

Participant Name \_\_\_\_\_

Date Completed \_\_\_\_\_

City, State \_\_\_\_\_

1  
# CPEs Awarded \_\_\_\_\_

II  
Level \_\_\_\_\_

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State Copy

**Continuing Professional Education**  
*Certificate of Attendance*

Nutrition for Children with Special Health Care Needs:  
Session Title: **Evaluating Nutrition Care Plans**

Participant Name \_\_\_\_\_

Date Completed \_\_\_\_\_

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II  
Level \_\_\_\_\_

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