Group Study Module 4: Evaluating Nutrition Care Plans

Speaker Notes


2. 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

   All of these materials are available free-of-charge on the website listed.

   Participants may also be interested in the self-study curriculum.

   There may be a charge for continuing education credit.

3. 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

   These four modules are available as group-study topics for inservices and other meetings. The material in these modules is best learned through an interactive process between the group leader and amongst the group members. A Leaders’ guide, powerpoint presentations, handouts and video segments are available free-of-charge.

4. 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

   These are the activities that we will be completing as part of this module.
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

Learning Objectives

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

The Process of Developing a Nutrition Care Plan

Nutrition services for all individuals generally require the same process…

Screening to identify risk (often, a SHCN is a risk factor) – we won’t cover this part today.
The assessment process is generally the same process (though may focus on different aspects): a series of evaluations used to make decisions about the need for and design of interventions. We’ll these briefly.

The focus of today’s discussion is on these last two steps in the process: intervention and evaluation.

Intervention – when a problem is identified, what is done? A plan should be developed with input from all players.

Evaluation – was the plan effective? How could it be improved? Does anything else need to be done?

With any special health care need or medical condition, practitioners should add these types of questions to the assessment process…ANTHROPOMETRICS
### 9
**The Process:**

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

<table>
<thead>
<tr>
<th>Question</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the condition affect biochemical markers?</td>
<td>Do medications affect biochemical markers?</td>
</tr>
<tr>
<td>Does the condition require special biochemical monitoring?</td>
<td></td>
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</tbody>
</table>

With any special health care need or medical condition, practitioners should add these types of questions to the assessment process...**BIOCHEMICAL MARKERS**

### 10
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<table>
<thead>
<tr>
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<td>Are there any secondary conditions that might affect nutritional status (e.g., constipation, malabsorption)?</td>
<td></td>
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With any special health care need or medical condition, practitioners should add these types of questions to the assessment process...**CLINICAL STATUS AND MEDICAL CONDITIONS**

### 11
**The Process:**

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<table>
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<tr>
<th>Question</th>
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<tbody>
<tr>
<td>Does the condition affect nutrient needs? (Energy, other macronutrients; vitamins, minerals; fluid)</td>
<td>Does the condition affect ability to eat? (Positioning, oral-motor skills, coordination, need for different portion size, acceptance of food, meal duration, social interaction)</td>
</tr>
</tbody>
</table>

With any special health care need or medical condition, practitioners should add these types of questions to the assessment process...**DIETARY AND FEEDING**

### 12
**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

If we think back to the nutrition care process, the final steps are intervention and evaluation. This next section will focus on developing strong interventions...or strong plans.

The intervention is the action...what will be done differently. Strong interventions are...*family will offer energy-dense foods at meal and snack times*

Another example of an intervention is “whole grain bread will be used instead of white bread”

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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

Color codes relate to specific words/parts of the intervention plan.
To evaluate the intervention, we look at the outcome, or the results. In order to assess whether or not the intervention was effective, the outcome indicator must be: measurable, specific, evaluated.

One example of an outcome measure is: weight-for-age between the 10th and 50th percentiles. Another example of an outcome is intake that provides 15 g fiber per day.

Outcomes can be long-term (e.g., adequate calcium intake for a young child, weight maintenance for an adolescent) or short term (regain of weight lost during an acute illness, adequate energy intake during the transition from tube-feeding to oral eating).

Now, we’ll look at some examples. For these children, goals were identified and interventions were planned, but the goals and interventions are not as strong as they could be. How could they be strengthened?

Prader Willi syndrome is a genetic disorder. Individuals with PWS have short stature and hypotonia. During infancy, feeding problems are usually present and growth problems are common. After infancy, problems with obesity can occur if access to food is not tightly controlled.

What is wrong with this goal? How could it be made stronger?

First, identify the problem to be addressed (low weight/age, weight/length, slow growth). Then, decide on the desired outcome.
The original outcome does not provide enough detail. The outcome needs to be measurable and specific to Sheldon’s situation. Is an increase to slightly above the 5th percentile appropriate? What about an increase to the 95th percentile? What is the timeline? If Sheldon’s weight loss was a result of an illness, and he regains weight quickly, is it appropriate to encourage even more weight gain?

Because he has short stature and hypotonia, it may not be reasonable to expect his weight-for-length to be in the “upper percentiles” (e.g., 75th to 90th), but below the 5th percentile is not appropriate.

Next, develop an intervention strategy that will enable the desired outcome to be achieved.

What is wrong with this intervention? How could it be strengthened?

The intervention needs to specifically state who, how and when the intervention will take place.

Here is a stronger intervention.

After 6 weeks, Sheldon’s weight-for-length was between the 5th and 10th percentiles. The RD recommended that Sheldon’s family continue to concentrate his formula, and his growth was monitored every 6 to 8 weeks as his intake of solid foods increased and formula decreased. Sheldon’s growth continued appropriately.

Things to consider for Sheldon/children with PWS: will Sheldon be able to take an increased volume? how long will it take for him to consume this amount? (for some children, may need to concentrate further)
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 >10th percentile in 6 months

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

Carla: Designing Interventions

Outcomes:
- Prealbumin will be in the normal range in 6 weeks
- Weight-for-length will be >10th percentile in 6 months
- Referral to feeding therapist by next clinic visit

Interventions: need to be designed to achieve the measurable outcome

Carla: Specific Interventions

Outcomes:
- Prealbumin will be in the normal range in 6 weeks
- Weight-for-length will be >10th 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

For these goals to be met, the RD recognized that Carla’s energy and protein needs would have to be met. She estimated that Carla would need, on average, an additional 200 kilocalories and 10 grams protein per day.

One food with added energy and protein will be offered at each meal and snack. (A list of foods and additives that add 25 kilocalories and 2 grams protein each was reviewed with Carla’s mother. Specific energy and protein goals were not discussed. Instead, Carla’s mother agreed to add one food per meal and snack.)

The nutritionist will contact Carla’s primary care physician to initiate the referral. (The RD also provided Carla’s mother with the names and contact information for therapists in their community.) Release of information consent forms were signed by Carla’s mother, permitting communication of medical information between the RD and Carla’s primary care physician.
Carla: Evaluating Progress

- Prealbumin will be in the normal range in 6 weeks
- Blood drawn: prealbumin was in the normal range
- Outcome modified: prealbumin was in the normal range in 6 mos
- Weight-for-length >10th percentile in 6 months
- Weight-for-length 10th percentile
- Outcome modified: weight/age 5%-25th %ile, length/age 10%-50th %ile, weight/length 10%-50th %ile
- Referral to feeding therapist by next clinic visit
  - Carla’s mother reported that referral made
  - Outcome modified: Carla will receive feeding therapy

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 95th %ile

- Aaron will maintain a healthy weight

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 95th %ile

- Aaron will maintain a healthy weight
- Aaron will maintain his current weight (32 kg) until his BMI-for-age is at the 75th %ile

Aaron: Interventions

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

- Aaron will eat foods with fewer kilocalories

What changes would make this outcome measurable?

Although a healthy weight is the desired overall result, the original outcome is not useful in a nutrition care plan. What weight is healthy? Should he not gain any weight for a period of time? How does his stature affect this goal? How will Aaron’s family know whether or not the intervention was successful?

The following statement would be a more measurable outcome: Aaron will maintain his current weight (32 kilograms) until his BMI-for-age is at the 75th percentile.

This intervention is not specific. Fewer kilocalories will help Aaron to maintain his current weight, but the intervention does not provide enough information about how to carry it out to make it effective.

To develop an effective intervention, the RD asked questions to determine why Aaron had gained so much weight (7 kg in 9 months).

Aaron’s physical activity level had decreased in the last 9 months, and since his mother had changed jobs, the family was eating out more and eating more convenience foods at home.
Aaron: Improved Interventions

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

Aaron’s family and the RD developed the following interventions:

Justin

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

Justin’s mother expressed frustration with Justin’s delayed feeding skills. She’s noticed that other children his age are able to feed themselves, and wants to give Justin every opportunity to develop these skills. What interventions could be designed to address the desired outcome of improved feeding skills?

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

These three interventions all would help address the feeding skill issue. How could each intervention be made stronger? What could be used as an outcome indicator?

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

Identify strategies that mother feels the family can implement and that address issues the family has identified as problems.

Justin: Improved Interventions

- Make a referral to a community feeding team at an early intervention center
- OUTCOME: appointment will be scheduled
- 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

This may involve contacting Justin’s primary care provider to initiate the referral, or simply contacting the early intervention center if Justin is already receiving services there.
As the plan is developed, short term outcomes that measure Justin’s feeding skills can be developed.

Other nutrition therapy goals for Justin include...

Are your current nutrition plans written with specific action plans and measurable outcomes?
- If yes - did you learn anything more from this discussion? What?
- If no, What do you think would be the result of writing improved nutrition goals and interventions?

What would you be able to do with this information?

Does your current or developing electronic medical record system allow for your nutrition plans to be written in these ways?

Would you need to change any of your notes or reports to reflect these types of goals and action plans?

Review “Resource” handout

Review local resource handout, if you have prepared one, or discuss and generate a list of local resources.

Ask the participants to complete the post-test and evaluation form and turn them in to receive their certificate of completion.