Nutritional Issues in Long-Term Care: Overview of Research Findings & Practice Implications

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Nutritional Issues in LTC

- Weight loss prevalence: Quality Indicator
- Major questions:

1. How do you monitor care quality?
2. What are the effective interventions?
3. How much staff do you need?

Training Activities: Nutrition

- Access to assessment tools

(Center Web-Site, Weight Loss Module)

- Overview of research findings
- How to conduct quality improvement
- How to individualize interventions

Pre-Test: Question #1

The medical record is inaccurate about which information?

a. Feeding assistance care delivery
b. Residents' daily intake
c. Supplement delivery
d. a, b, and c
e. Weight loss episodes

Medical Record Documentation

- Over-estimates nutrition care quality

- Feeding assistance (100% vs 40%)

- Oral intake of meals (+20%)

- Supplement delivery (3/day vs ≤1)

Medical Record Documentation

- Weight loss episodes

- MDS prevalence rates (5% and 10%) accurate at any one point in time

- Monthly weight data significantly higher rate (5%) over time

Practice Implications

- Weight loss common
- Significant care delivery problems
- More accurate information is essential

Pre-Test: Question #2

- Rank family preferences for interventions

-Supplements
-Snacks between meals
-Quality staff assistance during meals
-Appetite stimulant medication
-Attractive food choices
-Dining environment matches preference

Family Treatment Preferences

1. Attractive food choices
2. Quality staff assistance
3. Snacks between meals
4. Dining environment = preference
5. **Supplements**
6. **Appetite stimulant medication**

Practice Implications

- Supplements and medications most common approaches

BUT

- Families prefer behavioral approaches

Pre-Test: Question #3

- Most residents receive inadequate assistance during meals

TRUE FALSE

Adequate Feeding Assistance?

- Residents receive < 10 minutes/meal
- 70% to 80% meet MDS criteria low intake
- Mostly physical assistance
- Little to no verbal cueing or social stimulation to enhance independence

Pre-Test: Question #4

- Residents are likely to receive the least amount of assistance during which meal?

- Breakfast
- Lunch
- Dinner

Pre-Test: Question #4

- Residents are likely to receive the least amount of assistance during which meal?

- Breakfast & Lunch (<10 min/meal)

- **Dinner** (< 5 min/meal)

Pre-Test: Question #5

- Which residents are at higher risk for poor oral intake and weight loss?

a) MDS physically dependent (extensive to full assist, 3-4)

b) MDS independent or semi-dependent (supervision to limited assist, 0-2)

Higher Risk Group

- Semi-Dependent (MDS 0-2)

- physically capable of feeding

- receive little to no staff attention

- eat < 50% of most meals

Practice Implications

- Adequacy and quality of feeding assistance should be monitored by observation
- Poor across all meals but most problematic at dinner
- Oral intake should be considered when determining need for staff attention

Pre-Test: Question #6

- What resident : staff ratio is necessary to provide quality feeding assistance during meals?

a) 5:1
b) 7:1
c) 9:1
d) 10:1

Determining Staffing Needs

- Expert Consensus Panels
- Computerized Simulation Models
- Research studies
- Practice

Expert Consensus* on Mealtime Staffing Resident : Nurse Aide

- 2:1 for physically dependent residents
- 3-4:1 for semi-dependent residents
- Overall ratio of 5:1

*Testimony of the American Nurses' Association, IOM

Computerized Simulation Models

- Computerized projections based on time per care episode and estimates of number of residents in need
- 5 daily care processes, including feeding assistance
- 5:1 necessary to consistently provide care to all residents in need

Validation Research Study

- Staffing significant predictor of quality
- Homes staffed above 4.1 hprd (5-7:1) provided better care on 13 of 16 quality measures
- Dependent residents: 80% vs 55% received > 5 minutes of assistance

Practice Implications

- 5-7:1 ratio supported
- Staffing below this level may require
  - targeting of residents most in need
  - use of non-traditional staff

Pre-Test: Question #7

- Almost all residents will eat more of their meals if nursing staff spends enough time providing help.

TRUE FALSE

Feeding Assistance During Meals

- 2-day (6 meal) trial of 1:1 Assistance
- Graduated Prompting Protocol
  - Enhanced Independence
  - Promoted Social Interaction
  - Compliance with Preferences
- Change in oral intake

Feeding Assistance During Meals

- 40% to 50% show significant intake gains
- Staff time for 1:1 (6 to 36 min/meal)
- Staff time for Group 1:3 (42 min/meal)
- 2-day trial good way to determine
  - level of assistance need (MDS)
  - appropriateness of assistance

Pre-Test: Question #8

- If a resident does not eat enough of meals with assistance, what should be tried next?

a) Snacks between meals
b) Supplement
c) Medication
d) Combination

Snacks Between Meals

- Majority (80%) not responsive to mealtime assistance show significant caloric gains with snacks (2-day, 6 snack trial)
- 2-3 times per day between meals
- Variety of food and fluid choices
- 20 minutes per group of four

Medication

- Appetite stimulants (Megace)
- Limited effectiveness
- Combination assistance + medication

Supplements

- Mixed results: effectiveness
- Costly
- Often given inconsistently (≤ 1x/day) and/or inappropriately (with meals)
- Residents consume more of snacks (<100 cal/day vs. 400)

Intervention Summary

- Families prefer behavioral treatments
- 90% of residents with low oral intake will improve with feeding assistance during or between meals (snacks)
- Remainder need combination
- <10% unavoidable weight loss

Practice Implications

- 2-day trial (6 meals or snacks) best method to determine appropriate intervention
- Behavioral approaches effective with most (90%) residents
- Efficient
  - assist in small groups
  - nutritional care tasks throughout day

Pre-Test: Question #9

- What is the best way to determine a resident's preference for where they like to eat?

a) Ask the family
b) Ask the resident on 2 occasions
c) Both a and b
d) Encourage resident to eat in dining room for a few days, then ask

Residents' Preferences

- Differences between family and resident preferences
- Residents with cognitive impairment can answer preference questions
- Staff care routine shapes residents' preferences over time

Practice Implications

- Expose resident to the “best care practice” for a trial period, then ask

Pre-Test: Question #10

- A resident at risk for weight loss should not be allowed to eat most meals in their room because:

a) Inadequate assistance
b) Little to no social interaction
c) Depression
d) Respect preference, regardless

Room versus Dining Room

- Residents receive less assistance to eat and little social interaction when they eat in their rooms
- Medical record documentation (percent intake) more erroneous for residents who eat in their rooms
- Depression (and staff care routine) influences preference to stay in room

Practice Implications

- At-risk residents should be encouraged to eat most meals in the dining room
- Consider related staff care routines:

-Morning ADL care (11-7 shift)
-Transport to dining room (volunteers)
-Space (2 seatings)
-Atmosphere (dividers)

Pre-Test: Question #11

- Rank measures in order of importance for quality improvement:

-Weight loss prevalence
-Feeding assistance care provision
-Percent oral intake

Pre-Test: Question #11

- Rank measures in order of importance for quality improvement:

1. Feeding assistance care provision
2. Percent oral intake
3. Weight loss prevalence

Quality Improvement Measures

- Feeding assistance is directly under staff control
- Low oral intake more related to assistance and precedes weight loss

Practice Implications

- Continuous improvement programs focus on care process measures under control of staff

Pre-Test: Question #12

- What is the major problem with observing meals?

a) Nurse aides will change behavior
b) Residents will be bothered
c) Requires too much time
d) No major problems

Pre-Test: Question #13

- How frequently should a supervisor observe meals <u>to maintain</u> quality?

a) Daily
b) Once/week
c) Twice/week
d) Once/month

Practice Implications

- Observations during meals are

- essential for quality improvement
- non obtrusive
- do not require a lot of time
- more accurate & specific than medical record