
The Importance of Mealtime Observation for Quality Improvement

Sandra F. Simmons, PhD
Vanderbilt University, School of
Medicine, Center for Quality Aging

Nutritional Care in the Nursing Home

- Weight Loss Prevalence: Quality Indicator
- Major Questions:
 1. How do you monitor care quality?
 2. What are the effective interventions?
 3. How much staff time does it require?

Training: Nutritional Care Practices

- CMS Web-Cast “How to Enhance the Quality of Dining Assistance in Nursing Homes”

 - UCLA Borun Center Web-Site
<http://borun.medsch.ucla.edu>
- Weight Loss Prevention Module (CEUs)

Main Objectives

1. Overview of research findings

2. Discuss importance of observation in monitoring nutritional care quality

Overview of Research Findings

- Weight loss is common

- Related to adverse, costly outcomes:
 - Increase in hospitalizations
 - Delayed wound healing
 - Increase in mortality

Overview of Research Findings

- Medical record documentation inaccurate
 - Residents' oral food and fluid intake
 - Staff provision of feeding assistance
 - Staff delivery of supplements
 - Monthly weight values

- Direct observation protocols to identify risk

Medical Record Inaccurate

Feeding Assistance N = 400	Medical Record	Direct Observation
Need Assist	100%	46%
Weight Loss	100%	39%

Medical Record Inaccurate

- Residents' oral food and fluid intake *over-estimated* by 15% - 20%
- Oral liquid nutritional supplements
 - inconsistent delivery ($\leq 1/\text{day}$)
 - little to no encouragement (≤ 1 minute)
- Monthly weight values over-estimated – episodes of loss not identified in a timely manner

Medical Record Inaccurate

- Essential that supervisory staff have an information source independent of medical record documentation
- Supervisory staff = any staff member trained to oversee nutritional care delivery (licensed nurses, dietary, social worker, activities)

Feeding Assistance Care Problematic

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

Feeding Assistance Programs

- Effective when consistently provided
- 2 Feeding Programs
 1. During Meals (breakfast, lunch, dinner)
 2. Between Meals (snack delivery)

Feeding Program 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 Program 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

Feeding Program 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

Feeding Programs

- Efficient: small groups
 - 3-4 residents during meals
 - 4-8 residents between meals
- Target: 2-day (6 meals or snacks) trial
- Maintenance: prevents weight loss

Quality Improvement Monitoring

- Direct observations during and between meals
- Care process measures instead of outcomes:
 - *accuracy* of oral intake estimates
 - *adequacy* of assistance
 - *quality* of assistance

Quality Improvement Monitoring

- 1 supervisory-level observer (e.g., licensed nurses, dietary, social worker, activities)

- 2-3 meals for training

- 6-8 residents in the dining room

- 3-5 residents in rooms/hallway

Advantage of Observation

Observation yields information that is:

- *Specific*
- *Timely*
- *Accurate*

** Refer to Observational Tool*

Specific Information

Typical Documentation

- Feeding assistance provided: Yes/ No or “As Needed”
- Resident Response: Percent Eaten

Specific Information

- *Amount*: 15 minutes of assistance provided to Mr. Smith
- *Type*: Verbal cueing and physical assistance
- *Resident Response*: percent eaten plus problems (refusals, complaints)

Timely Information

- Care Processes

- linked to specific time and person
- translated into summary about quality to yield valid comparisons (across meals, staff, time)

Timely Information

- *Specific Time and Person:*

Mr. Smith received less than 5 minutes of assistance and ate less than 50% during lunch on January 8

- *Quality Summary:*

75% of residents in need of assistance received less than 5 minutes during lunch on January 8

Why *Timely* is Important

- Identify factors related to variable care delivery
- Reduces subjective interpretation
- Serves as an audit of medical record documentation

Observations: 10 Homes

Measure: Direct Observation	Usual Care
1. Eats <50% and chart \leq 60%	38%
2. Receives >5 min assistance	44%
3. Physical + Verbal assistance	65%

Rules of Observation: Common Area

- Observe 5+ residents in same area
- Use standardized form and definitions
- Observe 1 meal per day
- Calculate quality indicators
- Reduce observations to as few as 1 per week if quality stable and acceptable

Rules of Observation: Room

- Observe 3-6 rooms within same hallway
- Use standardized form and definitions
- Observe 1 meal per day, emphasis on dinner
- Calculate quality indicators
- Reduce observations to as few as 1 per week if quality stable and acceptable

Training Integrated with Feedback

- Realistic
- Linked to daily work activities
- Brief (5-10 minutes)
- Focused on specific staff behaviors
- Frequent (weekly)
- Depersonalized (group feedback)
- Personalized (video-based)

What is Needed to Start Training?

- Observation form
- Training Video: CMS Web-Cast
- Designated training person (e.g., licensed nurse, dietary, social worker, activities)
- Video camera (optional)

CQI Pilot Study: 1 Nursing Home

- Significant improvements in nutritional care
- Significant impact on weight loss prevalence
- Detected by state survey team
- Program expanded to other units/floors