Malnutrition and Healthcare Foodservice: What Role Do We Play?

Presenters

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AHF NATIONAL CONFERENCE

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Disclosures

- Chris Hartney: Vizient Medical Nutritional Work Group
- Erica Block: Board Member- MFNS, AHF, Beyond Hunger, Smithfield Culinary, General Mills, Council Member: IFMA Healthcare FLC, Vizient Food Council

Objectives

After attending this presentation, attendees will be able to:

- Identify criteria used to diagnose malnutrition in hospitalized patients
- Understand the Global Malnutrition Composite score
- Justify liberalization of diet restrictions to healthcare providers and regulatory agencies
- Develop guidelines to evaluate food items and recipes for inclusion on a patient menu

Malnutrition (Bad Nutrition)

Identifying Malnutrition in Adults

- Nutrition Screening
  - Required by CMS to be completed within 24 hours of admission to an acute care facility. Usually completed by nursing staff.
    - For LTC facilities a nutrition assessment is require for all new admissions
  - CMS does not require a specific nutrition screening tool be used.
  - Validated tools include:
    - MUST (Malnutrition Universal Screening Tool)
    - MST (Malnutrition Screening Tool)
  - Other high nutrition risk diagnoses or problems can trigger a full RD assessment
    - Wounds, Dysphagia, Nutrition Support (Enteral or Parenteral), Dietitian Consults

Malnutrition Screening Tools

- Tools generally look at
  - Weight status
  - Unintentional weight loss
  - Poor oral intake
- Some tools look at how sick a patient is or if there are other issues the patient has that may put them at risk for malnutrition.
- Point totals trigger a dietitian referral for a full nutritional assessment

Malnutrition Screening Tools

MST and MUST

Malnutrition Screening Tool (MST)

STEP 1: Screen with the MST

1. Have you recently lost weight without trying?

No	0
Unsure	2

If yes, how much weight have you lost?

2-13 lb	1
14-23 lb	2
24-33 lb	3
34 lb or more	4
Unsure	2

Weight loss score:

2. Have you been eating poorly because of a decreased appetite?

No	0
Yes	1

Appetite score:

Add weight loss and appetite scores

MST SCORE:

STEP 2: Score to determine risk

MST = 0 OR 1
NOT AT RISK
Eating well with little or no weight loss

If length of stay exceeds 7 days, then rescreen, repeating weekly as needed.

MST = 2 OR MORE
AT RISK
Eating poorly and/or recent weight loss

Rapidly implement nutrition interventions. Perform nutrition consult within 24-72 hrs, depending on risk.

STEP 3: Intervene with nutritional support for your patients at risk of malnutrition.

Notes:

Step 1 + Step 2 + Step 3

Step 1 BMI score

BMI kg/m²	Score
>20 (>30 Obese)	= 0
18.5-20	= 1
<18.5	= 2

Step 2 Weight loss score

Unplanned weight loss in past 3-6 months

%	Score
<5	= 0
5-10	= 1
>10	= 2

Step 3 Acute disease effect score

If patient is acutely ill **and** there has been or is likely to be no nutritional intake for >5 days
Score 2

If unable to obtain height and weight, see reverse for alternative measurements and use of subjective criteria

Acute disease effect is unlikely to apply outside hospital. See 'MUST' Explanatory Booklet for further information

Step 4
Overall risk of malnutrition

Add Scores together to calculate overall risk of malnutrition
Score 0 Low Risk   Score 1 Medium Risk   Score 2 or more High Risk

Step 5
Management guidelines

0 Low Risk
Routine clinical care
- Repeat screening
  Hospital – weekly
  Care Homes – monthly
  Community – annually
  for special groups
  e.g. those >75 yrs

1 Medium Risk
Observe
- Document dietary intake for 3 days
- If adequate – little concern and repeat screening
  - Hospital – weekly
  - Care Home – at least monthly
  - Community – at least every 2-3 months
- If inadequate – clinical concern – follow local policy, set goals, improve and increase overall nutritional intake, monitor and review care plan regularly

2 or more High Risk
Treat*
- Refer to dietitian, Nutritional Support Team or implement local policy
- Set goals, improve and increase overall nutritional intake
- Monitor and review care plan
  Hospital – weekly
  Care Home – monthly Community – monthly

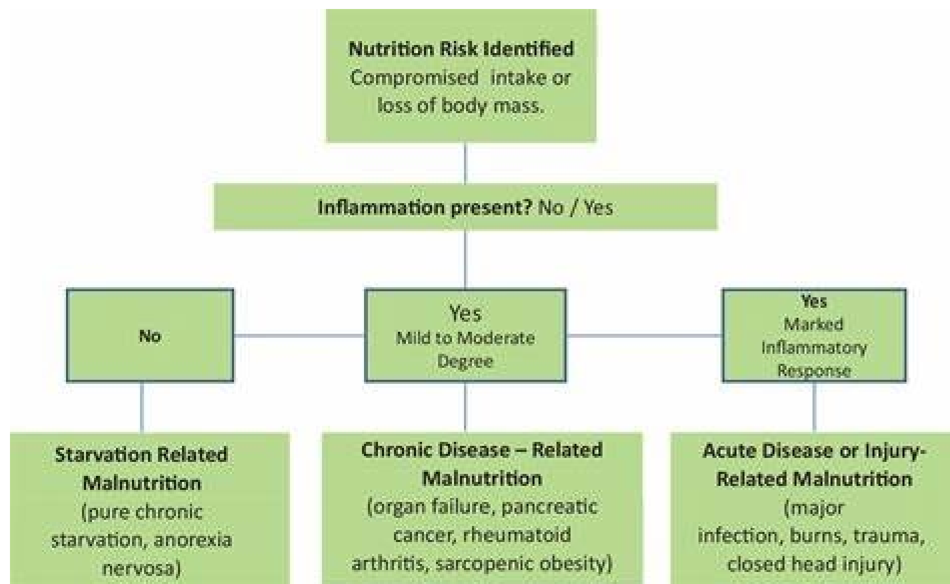
* Unless detrimental or no benefit is expected from nutritional support e.g. imminent death.

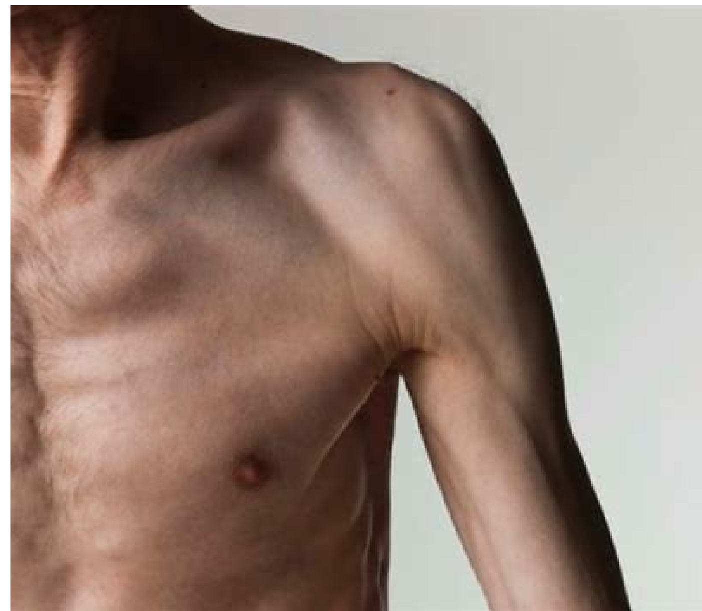
https://static.abbottnutrition.com/cms-prod/abbottnutrition-2016.com/img/Malnutrition%20Screening%20Tool_FINAL_tcm1226-57900.pdf
https://www.bapen.org.uk/pdfs/must/must_full.pdf Accessed 7/8/2024

	Non-Severe/Moderate Malnutrition			Severe Malnutrition		
Characteristics	Acute Illness or Injury	Chronic Disease	Social or Environmental	Acute Illness or Injury	Chronic Disease	Social or Environmental
Weight Loss	1-2% 1 week 5% 1 month 7.5% 3 months	>5% 1 month >7.5% 3 months >10% 6 months >20% 1 year	5% 1 month 7.5% 3 months 10% 6 months 20% 1 year	>2% 1 week >5% 1 month >7.5% 3 months	>5% 1 month >7.5% 3 months >10% 6 months >20% 1 year	>5% 1 month >7.5% 3 months >10% 6 months >20% 1 year
Energy Intake	<75% for >7 days	<75% for ≥1 month	<75% for ≥3 months	≤50% for ≥5 days	≤75% for ≥1month	≤50% for ≥1 month
Body Fat	Mild depletion	Mild depletion	Mild depletion	Moderate depletion	Severe depletion	Severe depletion
Muscle mass	Mild depletion	Mild depletion	Mild depletion	Moderate depletion	Severe depletion	Severe depletion
Fluid accumulation	Mild	Mild	Mild	Moderate to Severe	Severe	Severe
Grip Strength	N/A	N/A	N/A	N/A	Reduced for age/gender	Reduced for age/gender

Source: White, JV et al *J Parent Ent Nutr* 2012, 36 (3): 275-283

Acute and Non-Acute Malnutrition





Source: White, JV et al *J Parent Ent Nutr* 2012, 36 (3): 275-283

Nutritional Assessment by a Registered Dietitian Nutritionist (RD or RDN)

- Nutrition Focused Physical Exam
- Oral Intake History
- Lab and Medication Review
- Weight review
- Problem statement as needed
- Intervention(s) targeting the problem

Malnutrition Coding and Reimbursement

- With physician verified diagnosis of malnutrition hospitals can obtain higher levels of reimbursement for a patient admission
- However, if already had the highest level of reimbursement it is still important to diagnose malnutrition as it impacts the case mix index (acuity) This higher acuity can be used to support the need for more clinical staff.

Malnutrition Diagnosis Documentation

- It is important that you have a tool to ensure proper documentation.
- You can create your own or there are several software companies that have created tools to ensure proper documentation to obtain the highest level reimbursement.
- Note: Contract Foodservice companies are often utilizing these tools or developed their own programs to push these initiatives. And are sharing this at the C-suite level as a perk of their programs.

Global Malnutrition Composite Score (GMCS)

- Continuous Quality Measure (CQM) with CMS (eCQM=Electronic Continuous Quality Measure)
- First nutrition-focused CQM
- Hospitals can start reporting data in January 2025
  - eCQM Data obtained from the electronic medical record based on if components met

Why is this Important?

- CMS requires hospitals to report on 6 CQMs
  - 3 CQM= specifically chosen by CMS
  - 3 CQM= hospital can choose which ones to report
- CMS increasing requirement in future to report on 11 CQMs
- Reporting the GMCS is a win-win as it helps meet a requirement and puts treatment of malnutrition in the spotlight

Global Malnutrition Composite Score (GMCS)

- GCMS looks at the prevalence of malnutrition in those ≥ 65 years of age admitted to an acute care hospital.
- Assesses the percentage of hospitalizations for those ≥ 65 years of age with a length of stay greater than 24 hours at the start of the inpatient encounter who received optimal nutrition care during the current hospitalization
- Optimal nutrition care for malnutrition = care appropriate to the patient's level of malnutrition risk and severity
- The higher the percentage, the better a hospital does in providing optimal nutrition care

Valladares, AF, SM McCauley, M Khan, C D'Andrea, K Kilgore, K Mitchell (2021). Development and Evaluation of a Global Malnutrition Composite Score. *Journal Acad Nutr Diet*. 122(2): 251-258.

What Components Make-up the GMCS?

- Component Measure 1: Malnutrition Risk Screening (1 point)
- Component Measure 2: Nutrition Assessment (1 point)
- Component Measure 3: Malnutrition Diagnosis (1 point)
- Component Measure 4: Nutrition Care Plan (1 point)

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The GMCS Calculation Simplified

Nutrition screen completed and patient identified at risk/not at risk

1= Yes 0= No

For patients found to be at nutrition risk, and Nutrition Assessment is completed by RD/RDN and Not at Risk/Moderate Malnutrition/Severe Malnutrition identified

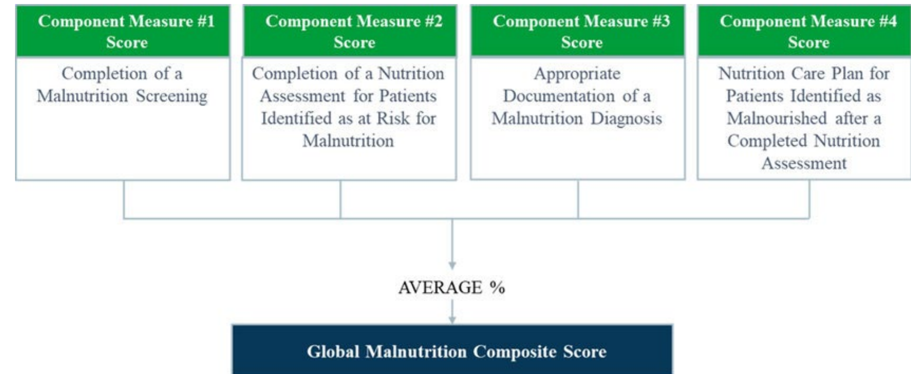
1=Yes 0=No

Physician or Advanced Practice Provider diagnoses patient with malnutrition and adds Moderate or Severe Malnutrition diagnosis to problem list

1=Yes 0=No

A documented Nutrition Care Plan with appropriate intervention is in the medical record

1=Yes 0=No



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Be Proactive and Volunteer!

- Let your accreditation team/quality improvement team know you want to start reporting the GMCS as a hospital-selected CQM
- Find your Information Services team as the GMCS calculation requires a build in the electronic medical record

Liberalized Diets

- The idea of liberalized diets in the acute hospital setting has been around for over 20 years
  - Long-term care: much more likely to have liberalized diets due to population age and likely poor oral intake
- Patients admitted to acute care hospitals are sicker and more likely to have malnutrition (or develop malnutrition) during their hospital stay
  - Can help treat and prevent further progression of malnutrition
- Patient-centered care

Hospitalized Patients May Have:

- Poor oral intake
- Increased energy needs
- GI issues and/or taste changes
- Need for modified textures or thickened liquids
- Need for patient-centered care
  - Food is something a patient can control at a time when they can't control anything else
  - Patients control what they eat and how well they eat
  - What happens when the patient is at home?

Patient Centered Approach

- Cultural considerations
- What/How does patient eat at home
- Medication dosing

Poor oral intake (<50% of meals)

- In-hospital poor oral intake and malnutrition associated with prolonged LOS, higher readmission rates, comorbidities, and mortality, and increased hospital costs (Curtis 2018)

Foodservice related issues

- Tray accuracy
- Temperature
- Quality
- Food not what usually eat at home

Nutrition care related issues

- Tolerance to food
- Inactivity
- Taste changes

Patient care related issues

- Feeding assistance
- Interruptions for tests and procedures

Why Liberalize Patient Diets?

- JL Scott-Smith et al (2007) UPMC Shadyside (landmark study—idea) asked question "Why not liberalize diet" more for patient-centered care than for malnutrition
- Hospital not ideal environment to make changes to diet given medication alterations and not actual environment they will have at home.

Steps to Take to Liberalize Diet

- Baseline data collection on meal consumption based on diet type
- General and Diabetic had significantly better intake than those on more restrictive diets (75%-100%).
- Renal/HH/Dysphagia eating only 40% of their meal tray
- Increased maximum thresholds based on average intake of 75% to increase options available for all diets and perception of quality.
- PNS/Med Ex approval of diet manual and diet guidelines with liberalized restrictions
- Liberalizing increased intake by 15%.

Liberalization- Renal and 2 gram Sodium

Renal Menu	Hemodialysis/Peritoneal Dialysis
Entrée: 25-30 gm protein, less than 500mg Na, K	No limit on any protein in foods, less than 700 mg Na, 600mg K
Sides or Dessert: less than 3 gm protein, 250 mg Na, K	Less than 300mg Na, K
Dairy: Once a day	Once a day
Condiments/Gravies: less than 150 mg Na, K	less than 300 mg Na, K
Soups: Not allowed	Not allowed
Fat: No restrictions	No restrictions

For all renal diets, NO: dried beans/peas, pudding, custards, yogurt, or peanut butter allowed.

Fruits Not Allowed	Veggies Not Allowed
Apricots	Asparagus
Banana	Potatoes
Cantaloupe	Spinach
Honey Dew	Tomatoes/Tomato Sauce
Kiwi	Brussel Sprouts
Nectarines	Okra
Orange/Orange Juice	Celery
Prunes, Prune Juice	Winter Squash
Raisins	Beets
Stewed Fruits	Avocado

2 Gram Sodium Guidelines

Soup	Not Allowed
Entrée	Less than 500 mg
Entrée Sandwich	Less than 600 mg
Sides/Starches/Vegetables	Less than 200 mg
Desserts	Less than 200 mg
Condiments	Less than 150 mg
Muffins/Breakfast Bread	Less than 200 mg

Liberalization- Heart Healthy

Heart Healthy/ Sodium Restricted/Low Cholesterol (3 gm Sodium, 10% of calories from saturated fat)

Food Category	Portion Size	Saturated Fat (gm)	Sodium (mg)	2 gm Sodium (mg) (CHF, Renal, Liver)
Soup	4-6 ounces	0	Less than 400	Not allowed
Entrée	3-4 ounces cooked meat 5-10 ounces if no meat	3	Less than 600	Less than 500
Entrée Sandwich	Variable	3	Less than 900	Less than 600
Sides/Starches/Vegetables	4 ounces	2	Less than 300	Less than 200
Desserts	Variable	2	Less than 300	Less than 200
Condiments/Dressing/Gravy	1-2 ounces	0	Less than 200	Less than 150
Muffins/Breakfast Breads	1-2 ounces	2	Less than 300	Less than 200

Allow cream soups and puddings made with skim milk as long as meet saturated fat and sodium requirements.
Avocado, Olive oil, Salmon, Hummus: allowed regardless of fat content as low unsaturated fat, heart health benefits.
Bacon: (1 slice) (3.5gm fat and 115 mg Na)-allowed for patient selection, not on scratch or house diet. Not allowed on 2 gm Na
Chicken sausage-allowed for patient selection, not on scratch or house diet. Not allowed on 2 gm Na as selection.

Next Steps

- Continuing to update menu with exiting offerings. Always looking for ways to have specials cross as many diets as possible.
- We still have to ensure that the offerings meet the physician prescribed diet ordered. (CMS)
- Ongoing physician and nursing education
- Dietitian empowerment to liberalize diet and have the conversations with providers
- Find a provider champion

Guidelines for Inclusion on the Patient Menu

- Moderation
- Portion Control
- Seasoning
- Colors
- Trends
- Cost
- Customer feedback