Syracuse Care Transition Coalition

Nutrition Sub-Committee Report

April 11, 2018
## Nutrition Sub-Committee Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Maria Mahar - Lead</td>
<td>Onondaga County Department of Adult &amp; Long Term Care Services</td>
</tr>
<tr>
<td>Mason Kaufman</td>
<td>Meals on Wheels of Syracuse</td>
</tr>
<tr>
<td>Susan Branning</td>
<td>St. Joseph’s Hospital Center</td>
</tr>
<tr>
<td>Maria Meola</td>
<td>Crouse Hospital</td>
</tr>
<tr>
<td>Wanda Pietromonica</td>
<td>The Crossings Nursing &amp; Rehab</td>
</tr>
<tr>
<td>Heather Hudson</td>
<td>Food Bank of Central New York</td>
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<tr>
<td>Amy Wilson</td>
<td>Food Bank of Central New York</td>
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<tr>
<td>Christa Baumes</td>
<td>Nascentia Health Options</td>
</tr>
<tr>
<td>Tammy VanEpps</td>
<td>CNYCC</td>
</tr>
<tr>
<td>Christine Price</td>
<td>ARC at Onondaga</td>
</tr>
<tr>
<td>Toni Heer</td>
<td>Upstate Medical Center</td>
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<tr>
<td>Debbie Adams</td>
<td>Nascentia Health</td>
</tr>
<tr>
<td>Kerry Dal</td>
<td>St. Joseph’s Health Home Care</td>
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<tr>
<td>Carrie Garvin</td>
<td>Upstate Medical Center</td>
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Goals

**Mission**
- Address the current system and role of nutritional assessment and intervention for patients with chronic care needs in the community
  - *Evidence suggests that 20% to 50% of all patients are at risk for or are malnourished at the time of hospital admission.*

**Goals**
- Identify malnutrition and make sure it is properly diagnosed
- Identify an evidence based standardized protocol to screen for malnutrition within 24 hours of admission and weekly thereafter
- Protocol will include:
  - Important components to incorporate into assessment process
  - Standardized interventions and communication process to next care provider/setting
  - Transfer of nutrition risk status to all involved provider settings for cross continuum care planning
    - Prescribed diet
    - Meal Planning Recommendations
  - Process for follow-up communication and assessment to determine if the plan of care is working

† Malnutrition Quality Improvement Initiative
[http://mqii.defeatmalnutrition.today/]
Introduction

- Malnutrition affects up to 60% of hospitalized older adults, yet only 3.2% of adults are diagnosed with malnutrition.
- Older adults make up 15.9% of the population of New York, and the older adult population is expected to more than double by the year 2060.
- Unsuccessfully treated malnourished older adults typically have longer lengths of stay, increased readmission rates, lower quality of life scores, and increased mortality rates.
- Further understanding of New York’s current healthcare practices for malnourished patients is needed to develop possible solutions to prevent older adults from being discharged into the community improperly nourished.

Objectives

- To describe perceptions of inpatient registered dietitians (RDs) regarding the diagnosis, treatment, and discharge of malnourished older adults.

Methods

- This descriptive study used a mixed method online survey to collect both qualitative and quantitative data.
- The survey consisted of 61 questions, 50 close-ended and 11 open-ended, each stemming from a construct in the conceptual framework.
- Of the close-ended questions, 26 used Likert-type scale responses, 1 used a continuous level of measurement, 16 collected ordinal and 7 collected nominal data.

Sample Population

- 113 RDs throughout the state of New York were recruited via email through a professional listserv with 29 excluded who were not in-patient RDs and 10 excluded who did not provide data beyond demographics.
- Response rate for questions varied from 54-100%.

Results

- Table 1: Socialization Components in Care Plan and Discharge Plan (n=62)

<table>
<thead>
<tr>
<th>Socialization Components</th>
<th>Number of Respondents (%)</th>
<th>Mean (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical/social screening</td>
<td>58 (95.2)</td>
<td>-</td>
</tr>
<tr>
<td>Medical/nutritional screening</td>
<td>58 (95.2)</td>
<td>-</td>
</tr>
<tr>
<td>Nutrition plan</td>
<td>58 (95.2)</td>
<td>-</td>
</tr>
<tr>
<td>Discharge summary</td>
<td>58 (95.2)</td>
<td>-</td>
</tr>
<tr>
<td>Parenteral nutrition</td>
<td>43 (70.0)</td>
<td>3.93</td>
</tr>
<tr>
<td>Enteral nutrition</td>
<td>41 (66.2)</td>
<td>3.90</td>
</tr>
<tr>
<td>Nutrition plan in discharge plan</td>
<td>58 (95.2)</td>
<td>3.70</td>
</tr>
<tr>
<td>Nutrition counseling</td>
<td>46 (74.2)</td>
<td>3.33</td>
</tr>
<tr>
<td>Nutrition education</td>
<td>58 (95.2)</td>
<td>3.21</td>
</tr>
<tr>
<td>Nutrition counseling in discharge plan</td>
<td>58 (95.2)</td>
<td>3.21</td>
</tr>
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</table>

Summary and Conclusion

- Although almost all RDs were knowledgeable about malnutrition and its risk factors in older adults, diagnoses were still reported to be infrequently documented. These findings suggest a fault in the healthcare system, because RDs are educated about malnutrition, yet this knowledge does not appear to be used in the identification of malnutrition.
- Despite the agreement of RDs on the success of standardized procedures in improving the health outcomes for malnourished older adults, the perceived meaning of “standardized” varied, underscoring the need for a standard definition of the term.
- Although almost all RDs believed socialization to play a role in the development of malnutrition, social support was infrequently addressed in treatment and discharge, suggesting a dichotomy between belief and practice in regards to social support.
- Nutrition is infrequently addressed in the post discharge care plans of malnourished older adults and community nutrition programs are seldom used as referrals, showing that inpatient facilities do not appear to place focus on nutrition care once an older adult is discharged.

Implications

- In terms of malnourished older adults, inpatient facilities should consider implementing standardized procedures with the following practices:
  - Screening upon admission.
  - Documentation of malnutrition diagnosis.
  - Individualized treatment plan.
  - Socialization-informed treatment and discharge.
  - Coordination with community nutrition programs.
- Further research is needed to measure objectively actual healthcare practices.
- More research should be done on the perceptions and effects of clearly defined standardized interdisciplinary healthcare approaches to malnutrition in older adults.

References


Acknowledgements

Thank you to the following people who have provided guidance and support throughout the research process: Patsy Brannon, PhD, RD

Beth-Elle Schussler, Dietetic Intern
Cornell University, Division of Nutritional Sciences

Figure 1. The sociocultural model demonstrates that the interaction of multiple constructs from multiple levels of influence come together to yield a specific nutritional status.
### Evidence Based Standardized Definition

**Severe Malnutrition in Adults**  
*J Acad Nutr Diet. 2012;112(5): 730-738*

<table>
<thead>
<tr>
<th>For Example: ICD-9 Code 262 ICD-10 Code E43</th>
<th>Acute Illness/Injury</th>
<th>Chronic Illness</th>
<th>Social/Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weight Loss</strong></td>
<td>&gt;2%/1 week</td>
<td>&gt;5%/1 month</td>
<td>&gt;5%/1 month</td>
</tr>
<tr>
<td></td>
<td>&gt;5%/1 month</td>
<td>&gt;7.5%/3 months</td>
<td>&gt;7.5%/3 months</td>
</tr>
<tr>
<td></td>
<td>&gt;7.5%/3 months</td>
<td>&gt;10%/6 months</td>
<td>&gt;10%/6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;20%/1 year</td>
<td>&gt;20%/1 year</td>
</tr>
<tr>
<td><strong>Energy Intake</strong></td>
<td>≤50% for ≥5 days</td>
<td>≤75% for ≥1 month</td>
<td>≤50% for ≥1 month</td>
</tr>
<tr>
<td><strong>Body Fat</strong></td>
<td>Moderate Depletion</td>
<td>Severe Depletion</td>
<td>Severe Depletion</td>
</tr>
<tr>
<td><strong>Muscle Mass</strong></td>
<td>Moderate Depletion</td>
<td>Severe Depletion</td>
<td>Severe Depletion</td>
</tr>
<tr>
<td><strong>Fluid Accumulation</strong></td>
<td>Moderate-Severe</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td><strong>Grip Strength</strong></td>
<td>Not recommended in ICU</td>
<td>Reduced for Age/Gender</td>
<td>Reduced for Age/Gender</td>
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</table>
Evidence Based Standardized Definition

Moderate (non-severe) Malnutrition in Adults
J Acad Nutr Diet. 2012;112(5): 730-738

<table>
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<tr>
<th>For Example: ICD-9 Code 263.0 ICD-10 Code E44.0</th>
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<td>1-2%/1 week</td>
<td>5%/1 month</td>
<td>5%/1 month</td>
</tr>
<tr>
<td></td>
<td>5%/1 month</td>
<td>7.5%/3 months</td>
<td>7.5%/3 months</td>
</tr>
<tr>
<td></td>
<td>7.5%/3 months</td>
<td>10%/6 months</td>
<td>10%/6 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20%/1 year</td>
<td>20%/1 year</td>
</tr>
<tr>
<td>Energy Intake</td>
<td>&lt;75% for &gt;7 days</td>
<td>&lt;75% for ≥1 month</td>
<td>&lt;75% for ≥3 months</td>
</tr>
<tr>
<td>Body Fat</td>
<td>Mild Depletion</td>
<td>Mild Depletion</td>
<td>Mild Depletion</td>
</tr>
<tr>
<td>Muscle Mass</td>
<td>Mild Depletion</td>
<td>Mild Depletion</td>
<td>Mild Depletion</td>
</tr>
<tr>
<td>Fluid Accumulation</td>
<td>Mild</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td>Grip Strength</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
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Malnutrition Screening Tool

**STEP 1: Screen with the MST**

1. Have you recently lost weight without trying?
   - No: 0
   - Unsure: 2

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: __________

3. 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 nutrition for your patients at risk of malnutrition.**

Notes: ___________________________________________

_________________________________________________

_________________________________________________
Food Insecurity Screening

The USDA defines food insecurity (FI) as a household-level economic and social condition of limited or uncertain access to adequate food. For your patients, being food insecure means they do not have access to the foods they need for a healthy, active life.

FOOD INSECURITY SCREENER

This two-item FI screen is based on Questions 1 & 2 of the U.S. Household Food Security Survey and has been validated for use as a screening tool in the health care setting.

The FI screen quickly identifies households at risk for FI, enabling providers to target services and treatment plans that address the health and developmental consequences of FI.6

I'm going to read you two statements that people have made about their food situation. For each statement, please tell me whether the statement was often true, sometimes true or never true for your household in the last 12 months.

1. “We worried whether our food would run out before we got money to buy more.” Was that often true, sometimes true or never true for your household in the last 12 months?

2. “The food that we bought just didn’t last, and we didn’t have money to get more.” Was that often, sometimes or never true for your household in the last 12 months?

A response of “often true” or “sometimes true” to either question = positive screen for FI.
Opportunities

- Adopt standardized evidence based screening tool that includes food insecurity screening questions
- Utilize standardized definitions for severe and moderate malnutrition
- Incorporate socioeconomic factors into assessment
- Identify process to communicate hi-risk nutrition status at time of transition to include:
  - Next care setting (SNF, Home Health)
  - Managed Care Plan
  - Primary Care Physician
  - Community Service Providers
    - Meals on Wheels
    - Department of Adult & Long Term Care Services
- Reduce malnutrition rates
- Reduce hospital readmissions
Follow Up Instructions:
The patient was given an after visit summary. Patient will follow up with PCP in 1-2 weeks and keep scheduled appointment with his Oncologist.

Malnutrition Criteria
Code Type: Severe-Chronic (E43)
Severe-Chronic Criteria: Weight Loss >10%/6mos, Severe Body Fat Depletion, Severe Muscle Mass Depletion
Recommended Discharge Diet: High calorie, High protein diet
Medical Food Supplements: Ensure Enlive/Ensure Plus (3-4x daily)
Additional Information: RDN to communicate update to Upstate Cancer Center RDN who has been following patient and assisting in obtaining oral nutrition supplements. Pt. has trialed various supplements and feels that Ensure Enlive is best tolerated. Pt should f/u w/ social worker regarding his SNAP (food stamp) benefits.
Challenges

- Patients discharged to home without formal or informal supports
  - How does the health care system include the family in the discharge planning for these high risk clients?

- Electronic method to communicate nutritional status across healthcare and community service providers involved in care management of patients needs to be identified (RHIO?)

- Others?
Discussion

Next Steps