Combatting Older Adult Malnutrition: Tools and Best Practices for Community-Based Organizations

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- Mary Beth Arensberg, Abbott Nutrition
- Mary Walsh, National Council on Aging
- Judy Simon, Maryland Department on Aging

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National Council on Aging

Improving the lives of 10 million older adults by 2020
The Problem of Older Adult Malnutrition
Malnutrition Defined

**What is malnutrition?**

Malnutrition means poor nutrition whether –

**What are the causes of malnutrition?**

- Clinical
  - Disease-associated malnutrition

- Functional/Mental Health
  - Limited ability to shop, prepare, eat food

- Socioeconomic
  - Finances
What’s New?

Greater link being made between malnutrition and food insecurity

3,000,000
Americans were food insecure in 2014

50%
Projected increase for food insecure older adults by 2025

2x
Food insecure seniors more likely to report fair/poor health status and have higher nutritional risk

Source: Senior Hunger Facts. Feeding America
Underdiagnosis of Malnutrition

36 million U.S. hospitalizations per year

15% – 60% are malnourished

Less than 7% are diagnosed with malnutrition

4 million – 19 million cases left undiagnosed and therefore untreated!

Malnutrition has an impact on patient health and independence

Malnutrition-associated outcomes include:

• Frailty
• Disability
• Loss of independence
• Increased risk for falls
• Decreased effectiveness of medical treatments
• Further increased medical complications for other diseases
Malnutrition Remains a Common and Costly Healthcare Problem

$157 Billion
Disease-associated malnutrition annually imposes a significant economic burden on our society and our healthcare systems

$51.3 Billion
The total annual burden from DAM borne by the older adult population

Goals of Defeat Malnutrition Today

1. Achieve recognition of malnutrition as key indicator and vital sign of health risk for older adults

2. Achieve greater focus on malnutrition screening and intervention through regulatory and/or legislative change across the nation’s health care system
New Blueprint identifies multi-disciplinary and cross-sector goals

Strategies target older adult malnutrition for national, state, and local stakeholders:

• Improve quality of nutrition care practices
• Improve access to high quality nutrition care and services
• Generate clinical research on nutrition quality of care
• Advance public health efforts to improve nutrition quality of care

Source: Defeat Malnutrition Today. 2017
State Economic Burden of Disease-Associated Malnutrition in Older Adults

Source: Du et al, PLOS One, 2016
Includes template legislation to help raise awareness, develop public health policies, and implement solutions to combat malnutrition and thus benefit older adults and their families and communities.

Source: Defeat Malnutrition Today. 2017
Good Malnutrition Care Makes a Difference
Two important signs of malnutrition are:

1. Unintentional weight loss
2. Lack of appetite

Diagnosis of malnutrition is made when patients have 2 or more of the following characteristics:

- Weight loss over time
- Loss of muscle mass
- Insufficient food intake compared with nutrition requirements
- Loss of fat mass
- Fluid accumulation
- Measurably diminished grip strength

Loss of lean body mass, strength, and/or functionality (sarcopenia) can reduce body’s ability to heal, fight infection/disease; increases risk of falls, fractures, death

Average loss of lean body mass with age

... and consequences can be debilitating

Prevalence of Sarcopenia by Ethnicity

Source: Du et al, FASEB Journal, 2017
Prompt Intervention Yields Results
Impact of a Multidisciplinary Nutrition Program

Hospital Costs

Length of Stay

Readmission

Malnutrition is a Quality Issue

Lack of consistent screening with a validated tool

Lack of diagnosis compared to published estimates of prevalence

Lack of treatment of those identified as malnourished

Lack of monitoring of status
  = poor quality care
The Malnutrition Quality Improvement Initiative (MQii) Offers a Solution to Enhance the Quality of Malnutrition Care in the Hospital

The MQii is based on patient-driven nutrition practices that include patient preferences and risk factors. Malnutrition electronic Clinical Quality Measures (eCQMs—shown in gray) have been developed to help improve care practices and patient outcomes.

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Screening
Nutrition screening using a validated tool for all patients with a hospital admission

Assessment
Nutrition assessment using a standardized tool for all patients identified as at-risk for malnutrition

Diagnosis
Documentation of nutrition diagnosis for all patients identified as malnourished

Care Plan Development
Establishment of a nutrition care plan for all patients identified as malnourished or at-risk for malnutrition

Intervention Implementation
Implementation of a nutrition care plan including treatment for all patients identified as malnourished or at-risk for malnutrition

Monitoring/Evaluation & Discharge Planning
Implementation of processes, including discharge planning, that provide ongoing monitoring and support the care of patients identified as malnourished or at-risk for malnutrition
Open Access MQii Toolkit

Available at: www.MQii.Today

Tools and Resources

- Patient Engagement
- Staff Education Tools
- Quality Improvement
- Data Management
NCOA and Malnutrition

- Malnutrition spans two of NCOA’s core impact areas: Health and Economic Security

- A 2016 survey by NCOA found that community-based organizations want and need materials to raise awareness about and address malnutrition among older adults
Health and Malnutrition

NCOA manages two federally funded centers to support community-based organizations in implementing evidence-based healthy aging programs:

- National Falls Prevention Resource Center
- National Chronic Disease Self-Management Education Resource Center
Health and Malnutrition

- **Falls**: Loss of muscle mass and dizziness from malnutrition can increase the risk of falling among older adults.

- **Chronic Disease**: Older adults with chronic illness are at greater risk for poor nutrition; an unhealthy, inadequate diet can contribute to heart disease, type 2 diabetes, osteoporosis, high blood pressure, high cholesterol, and some cancers.
Economic Security and Malnutrition

- NCOA’s Senior Hunger Initiative finds and enrolls eligible older adults into the Supplemental Nutrition Assistance Program (SNAP) to help them pay for healthy food

- NCOA’s BenefitsCheckUp® screens older adults with limited income for benefits like SNAP
A recent study on the effect of access to public benefits for dual eligible older adults show how SNAP benefits have a significant impact on nursing home admissions and hospitalization.

https://www.ncoa.org/resources/infographic-seniors-snap-5-myths-busted/
Malnutrition Resource Hub

- Designed to help community-based organizations reduce malnutrition among older adults
- Includes practical resources, tools, and ideas to help you develop a malnutrition plan
- [https://www.ncoa.org/center-for-healthy-aging/resourcehub/](https://www.ncoa.org/center-for-healthy-aging/resourcehub/)
Access resources that will help you better understand malnutrition among older adults
Build a Knowledge Base

- Reports/Books
- Fact Sheets/Websites
- Videos/Webinars
- Toolkits
- Training/Continuing

- Education
- Infographics
- Publications/Articles
- Consensus/Policy Statements
Build a Knowledge Base – Examples

- ACL Report: Opportunities to Improve Nutrition for Older Adults and Reduce Risk of Poor Health Outcomes

- Numerous webinars and videos highlighting aspects of nutritional health
Support Integration Across Professional Roles

Combatting malnutrition among older adults takes a team. See how different professionals can play a role.
Support Integration Across Professional Roles

- Executive Director
- Community Dietitian
- Food Service Director
- Hospital Clinical Nutrition Manager
- Hospital Discharge Planner
- Nutrition Program Manager
- Social Worker
Support Integration Across Professional Roles—Examples

- **Executive Director** — Recognize opportunities for collaboration, provide “top down” support for staff, work with community and health care partners to identify and treat malnutrition.
Use Existing Organizations and Programs

Understand the federal assistance programs, state and community-based organizations, and international efforts that are addressing malnutrition among older adults.
Use Existing Organizations and Programs

- Federal Assistance Programs
- National Organizations
- International Programs
- Awareness Efforts
Use Existing Organizations and Programs - Examples

- Find out which organizations are addressing malnutrition
- And about awareness efforts like Malnutrition Awareness Week and National Nutrition Month
Implement Assessments and Tools

Get practical tools to use at a community level
Implement Assessments and Tools

- Malnutrition Screening and Assessment Tools
- Menus and Meal Plans
- Patient Education Materials
Implement Assessments and Tools - Examples

- **Mini Nutritional Assessment**
- **Healthy Eating After 50**
New Resources for Malnutrition Awareness Week

- Features in our e-newsletters and on social media
- Downloadable placemats for NISC members
- New video on malnutrition and seniors launching in September
- Twitter Chat with ASPEN on Sept. 19 @ 1p.m. ET
- Blog posts about malnutrition featuring ASPEN
- Facebook and Google ads focused on malnutrition
Learn more

- NCOA: [www.ncoa.org](http://www.ncoa.org)
- National Falls Prevention Resource Center: [www.ncoa.org/FallsCenter](http://www.ncoa.org/FallsCenter)
- National Chronic Disease Self-Management Education Resource Center: [www.ncoa.org/CDSMECenter](http://www.ncoa.org/CDSMECenter)
- Senior Hunger Initiative: [www.ncoa.org/SeniorHunger](http://www.ncoa.org/SeniorHunger)
Community Malnutrition Resource Hub

State & Local Approaches
Do You Know This Person?

- Limited income
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
- Changing taste buds
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
- Changing taste buds
- Living alone
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
- Changing taste buds
- Living alone
- Medication side effects
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
- Changing taste buds
- Living alone
- Medication side effects
- Poor appetite
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
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- Living alone
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- Poor appetite
- Restricted diets
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
- Changing taste buds
- Living alone
- Medication side effects
- Poor appetite
- Restricted diets
- Lack of mobility
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
- Changing taste buds
- Living alone
- Medication side effects
- Poor appetite
- Restricted diets
- Lack of mobility
- Depression
Limited income
Trouble swallowing/chewing
Poor dental health
Changing taste buds
Living alone
Medication side effects
Poor appetite
Restricted diets
Lack of mobility
Depression
Dementia
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
- Changing taste buds
- Living alone
- Medication side effects
- Poor appetite
- Restricted diets
- Lack of mobility
- Depression
- Dementia
- Gastrointestinal problems
Do You Know This Person?

- Limited income
- Trouble swallowing/chewing
- Poor dental health
- Changing taste buds
- Living alone
- Medication side effects
- Poor appetite
- Restricted diets
- Lack of mobility
- Depression
- Dementia
- Gastrointestinal problems
- Chronic conditions
Poll
Do you know this person?
Two or more factors may mean risk for malnutrition

1. Yes
2. No
3. Unsure
Adults and family caregivers: significance of malnutrition

- 55% Very significant
- 16% Somewhat significant
- 28% Not too significant
- 1% Not at all significant

Community Food Insecurity Resources

Senior Nutrition Program
Includes group dining (senior centers, etc) and home delivered meals. Strong nutritional guidelines in place. Nutrition education required. May offer Nutrition Counseling.

Food Pantries and Religious Organizations
Options vary by area, some organizations may require certification that individual is low-income.

SNAP/FDPIR & SNAP-ed
Supplemental Nutrition Assistance Program (SNAP) provides electronic benefit card to purchase eligible foods. Food Distribution Program for Indian Reservations (FDPIR) provides commodity foods. SNAP-ed provides nutrition education.

Emergency Food Assistance Program (TEFAP)
Supplements diets by providing emergency food, generally available through food banks, food pantries and soup kitchens. Available to any low income individual.

Commodity Supplemental Food Program
Supplements diets by providing package of commodity foods on a monthly basis. Includes milk/milk powder, cheese, fruits/vegetables, grains and sometimes meat or fish.

Senior Farmers Market Nutrition Program
Provides a set amount of “coupons” or “checks” to any qualified older adult, to purchase foods at farmers markets and farm stands.

Medicaid (varies by state)
Medicaid may pay for home delivered meals for qualified individuals.

Child and Adult Care Food Program
Provides funding to adult care centers for nutritious foods served to older adults and individuals with disabilities.

All older adults eligible

Low income older adults eligible

Source: Hunger in Older Adults: Challenges and Opportunities for the Aging Services Network. Meals on Wheels America. 2017.
Community Organization
Cross-Departmental Roles
Acute & Post-Acute Care

- Screening
- Diagnosis
- Treatment
- Care Plan

Clinics & Doctors Offices

- Screening
- Diagnosis
- Treatment
- Care Plan

Community Provider

- Screening
- Support & Inform Care Plan
- Treatment
- Address Root Cause(s)
- Communicate Progress
<table>
<thead>
<tr>
<th>PROGRAM STAFF</th>
<th>SCREEN</th>
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<tr>
<td>ADRC</td>
<td>Malnutrition</td>
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<td></td>
<td>Falls Risk</td>
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**SCREEN**
- Malnutrition Screen
- Falls Screen
- Frailty Screen
- Depression Screen
- Benefits Checkup

**SUPPORT & INFORM CARE PLAN**
- Enroll in social supports
- Refer to meal programs including group dining
- Identify insurance and program eligibility options
- Refer to EB programs
- Transportation

**TREATMENT AND ADDRESS ROOT CAUSES**
- Enroll in financial supports
- Assist with securing insurance
- Refer to Behavioral Health, caregiver support, Physician, Community Health Worker

**CASE MANAGER**

**COMMUNICATE PROGRESS**
- Report progress and service delivery to healthcare provider
- Client goals
- Regular follow-up for high risk clients
- Assist with hospital messages
Senior Nutrition Program
- Home Delivered Meals & Safety Checks
- Group Dining
- Nutrition Education
- Nutrition Counseling

Person Centered Assistance
- Medicare/Medicaid Eligibility & Information
- SNAP, financial supports
- Counseling

Senior Center & Health Promotion
- Falls Prevention, Healthy Eating
- Chronic Disease Self Management
- Physical Activity Programs
- Health Screenings & Immunizations

Photo credit: shutterstock 39878656
## Food Insecurity Screening of HDM Clients

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Criteria</th>
<th>Client Description</th>
</tr>
</thead>
</table>
| A              | - Unable to cook  
                 - Does not have help with cooking | Unlikely client is able to eat healthy meals on a consistent basis, since client cannot prepare food and does not have regular help preparing meals. |
| B              | - Can cook or has help  
                 - Food insecure  
                 - Cannot obtain groceries | Client cannot obtain groceries. A meal could be prepared if the client could receive additional financial assistance and help getting food into the home. |
| C              | - Can cook or has help  
                 - Food insecure  
                 - Can obtain groceries | Client is capable of obtaining groceries and preparing food, however, cannot afford it. |
| D              | - Can cook or has help  
                 - Food secure  
                 - Cannot obtain groceries | Client can afford food and can prepare it, but is unable to get groceries into the home. Grocery delivery services may be an option. |
| E              | - Can cook or has help  
                 - Food secure  
                 - Can obtain groceries | Client can afford food and has meal assistance, however, may have some physical limitations or assistance getting these supports into place. |

### Total Priority Level Distribution for Maryland Home Delivered Meals Q3 FY2017

- **A**: 64%  
- **B**: 11%  
- **C**: 7%  
- **D**: 8%  
- **E**: 10%

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Tool created via “2014 Maryland Meals to Most in Need: Home Delivered Meals Screening tool to Prioritize Clients’ Risk for Hunger,” opportunity-based grant funded by MOWA and Subaru. Academic partner: University of Maryland, Professor N. Sahyoun, PhD, RDN
Person-Centered Community
Malnutrition Interventions

Stepping Up Your Nutrition:
New “Session Zero” for Stepping On
Evidence-Based Falls Prevention Program

Goal:
Participants will understand the importance of balanced nutrition for the prevention of falls and be able to identify the key warning signs of poor nutrition.

Key Messages:
• How nutrition status, and muscle strength are linked to falls risk
• How exercise and protein are key to maintaining strong muscles

For further information, contact MAC Center of Excellence, Executive Director: Leigh Ann Eagle, lae2@macinc.org
Here are some ideas for an action plan to Step Up Your Nutrition:

___ Weigh myself weekly
___ Drink more water
___ Eat protein snacks
___ Eat more fruits
___ Have lunch at senior center
___ Drink/eat more dairy food
___ Eat a variety of foods
___ Talk with my friends or family about my nutrition concerns
___ Talk with my doctor or a dietitian about my nutrition concerns

___ Drink more liquids during the day
___ Eat more protein at mealtime
___ Eat more vegetables
___ Eat a meal with a friend
___ Drink a liquid protein drink
___ Find someone to food shop
___ Eat at least 3 meals a day

Answer these questions:

What are you going to do?
How much are you going to do it?
When are you going to do it?
How many days a week are you going to do it?

Early Recognition
★ 2017 International Council on Active Aging Innovator Award
★ AARP Foundation invitation to include Stepping Up Your Nutrition in its catalog of ‘Promising Practices’ online toolkit
Person-Centered Community
Malnutrition Interventions

• Existing meals meet most patient needs:
  • 30g Protein three times daily
  • Dietary Guidelines and RDIs
  • Low Sodium
  • Low Fat, Low Sugar
  • High Fiber

• Encourage “liberalizing” diets to address malnutrition. Food not eaten can’t help individual’s recovery

• Add options for snacks or liquid supplements in addition to meals, especially with diagnosis of malnutrition.
# 12 Ways Malnutrition Can Impact Your Health—and 6 Steps to Prevent It

Good nutrition is vital at every stage of life, but as you age, staying well-nourished is even more important.

<table>
<thead>
<tr>
<th>Muscles</th>
<th>Bones &amp; Joints</th>
<th>Immune System</th>
<th>Organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Mobility</strong>: Decreased muscle mass can make it harder to do simple tasks like walking, driving, and shopping.</td>
<td>4. <strong>Arthritis</strong>: Inflammation of the joints can cause pain and stiffness.</td>
<td>8. <strong>Illness</strong>: A poor immune system can put you at risk for infections.</td>
<td>10. <strong>Eyes</strong>: Vitamin and mineral deficiencies can accelerate vision loss.</td>
</tr>
<tr>
<td>2. <strong>Breathing</strong>: Loss of muscle can lead to breathing difficulties and pneumonia.</td>
<td>5. <strong>Osteoporosis</strong>: This bone condition increases the risk of fractures.</td>
<td>9. <strong>Cancer</strong>: Malnourished individuals may have more difficulty tolerating chemotherapy.</td>
<td>11. <strong>Brain</strong>: Nutrient deficiencies may speed up the rate at which your brain loses neurons.</td>
</tr>
<tr>
<td>3. <strong>Perone</strong>: Lost muscle means lost protein that your body needs to fight infection.</td>
<td>6. <strong>Joints</strong>: Malnutrition can make it harder to recover from hip or knee replacement surgery.</td>
<td></td>
<td>12. <strong>Kidneys</strong>: A lack of fluids and electrolytes can cause your kidneys to overwork.</td>
</tr>
</tbody>
</table>

## 6 Steps to Prevent Malnutrition

1. **Understand what malnutrition is and isn’t.** Learn the facts and warning signs at [senac.org/NutritionFacts](http://senac.org/NutritionFacts).
2. **Make smart food choices.** Get tips to build a healthy plate at [senac.org/EatWell](http://senac.org/EatWell).
3. **Try an oral nutritional supplement.** It can provide you with balanced nutrition.
4. **Take care of your teeth.** A healthy mouth makes it easier to eat well.
5. **Consult your health care provider.** If you have unintentional weight loss, a poor appetite, or other problems that affect eating.
6. **Find help.** Contact [MealsOnWheelsAmerica.org](http://MealsOnWheelsAmerica.org) to see if you can get home-delivered meals and find out if you’re eligible for help paying for food at [BenefitsCheckUp.org/SNAP](http://BenefitsCheckUp.org/SNAP).
Person-Centered Community Malnutrition Interventions

- Include caregivers, spouses
  - Awareness
  - Education
- Integrate malnutrition risk to determine services, priority
  - Groceries
  - Encourage Congregate meals
  - Vary days, include weekends
  - Only deliver hot meals to clients who can not heat food
What is your next step?
Questions & Answers

Type your question into the chat box on the lower left-hand side of your screen.

For reference, the recording of this webinar will be available shortly on www.ncoa.org/cha.