The audio for today’s session will play over your computer speakers. There is NO dial-in telephone number.

To ask questions or share comments, access the group chat by clicking on the dark blue square that has a chat icon.

You may view the handouts for today’s session by clicking the green square with the sheet of paper.
In his role as chief medical officer and executive vice president of clinical research, medical informatics, and telehealth, Dr. Zia Agha advances West Health’s mission to enable seniors to successfully age in place, with access to high-quality, affordable health and support services that preserve and protect their dignity, quality of life and independence.

Dr. Agha serves as physician leader for West Health, which includes the West Health Institute, Gary and Mary West Health Policy Center and Gary and Mary West Foundation, ensuring its research portfolio and initiatives are translated into clinical practice, policy reform and scalable innovations that will allow seniors to successfully age in place. Dr. Agha leads the development and execution of clinical research activities and brings a comprehensive understanding of the evolving field of clinical informatics such as clinical information systems, telehealth and data science.

Dr. Agha joined the West Health Institute in 2014 and leads the organization’s clinical research and medical informatics initiatives, focused on creating and advancing senior-appropriate acute and chronic care models, and improving access to long-term services and supports.

Prior to joining West Health, Dr. Agha was director for the Health Services Research and Development (HSRD) division at VA San Diego Healthcare System and Professor of Medicine at the University of California, San Diego where he currently holds an appointment as a part-time professor.

A practicing physician, Dr. Agha received his MD degree from Aga Khan University in Karachi, Pakistan and a MS degree in Clinical Epidemiology and General Internal Medicine fellowship in Health Services Research from the Medical College of Wisconsin. He is a Diplomat of the American Board of Internal Medicine.
Senior Malnutrition: Overview

- Prevalence and impact of malnutrition
- Tools and approaches to identify and address malnutrition
- Advancing malnutrition care through innovative, senior-centered care models
Human and Financial Impact of Malnutrition

Disease-associated malnutrition estimated to cost $51.3 billion annually

- Hospital costs can be up to 300% greater for individuals who are malnourished.
- Malnourished hospitalized adults have up to 5x increased mortality and 50% higher readmission rates.
- Disease-associated malnutrition in older adults is estimated to cost $51.3 billion annually.

Prevalence Across Care Settings

- Acute Care:
  - 20%-50% of adults are malnourished or at risk - only 7% diagnosed
  - 5X more likely to have an in-hospital death
  - 54% higher likelihood of hospital 30-day readmissions
  - Cost per readmission for patients with malnutrition 26-34% higher

- Post-Acute Care:
  - 14%-51% of seniors are malnourished

- In Community:
  - Estimated 6%-30% of seniors are malnourished
The risk factors associated with malnutrition are multifaceted and are often synergistic or bidirectional

- Clinical
- Social
- Psychosocial

Disease States:
- Poor intake
- Chronic disease
- Acute disease or injury-related

Malnutrition Diagnosis:
- Insufficient energy intake
- Weight loss
- Loss of muscle mass
- Loss of subcutaneous fat
- Localized or generalized fluid accumulation
- Diminished functional status
Consequences of Malnutrition

Consequences of malnutrition are significant:

- Functional
- Clinical
- Healthcare System

Identify: Screening Tools for Malnutrition

Screening tools most often used in the clinical setting:

- Mini Nutritional Assessment Short Form (MNA-SF)
- Malnutrition Screening Tool (MST)
- Malnutrition Universal Screening Tool (MUST)
- Seniors in the Community: Risk Evaluation for Eating and Nutrition II (SCREEN-II)
- Subjective Global Assessment (SGA)
Identify: Screening Tools for Social Risk Factors

- Social needs screeners:
  - Accountable Health Communities (AHC) Health-Related Social Needs (HRSN) Screening Tool
  - Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE)
  - Health Leads: 2018 Social Needs Screening Toolkit
Addressing Malnutrition

Defeat Malnutrition Today Coalition
Advancing comprehensive malnutrition care

Strategy: Comprehensive Malnutrition Care

Senior Malnutrition Visioning Session
West Health: Advancing Senior-Appropriate Care Models

Collaborating with Healthcare and Community-based Organizations to Identify, Intervene, Evaluate

- Identify-appropriate acute care models
  - Geriatric Emergency Department
  - Senior Dental Center

- Senior-appropriate chronic care models
  - Home-based Primary Care
  - Palliative Care

- Long-term services and supports delivery models
  - Senior Nutrition & Malnutrition
  - Medical and Social Care Integration

Identify, Intervene and Evaluate: UCSD Senior Emergency Care Unit

Identify: GENIE screens for risks that threaten health, safety and wellbeing

Intervene: Referrals for follow up in both the health and social domains to address risk

Evaluate: Measure results and outcomes
Identify, Intervene and Evaluate: Gary and Mary West Senior Wellness and Dental Center

Food Insecurity

Over 13 million seniors face hunger every year!

Seniors who are food insecure are at significant risk for malnutrition and increased health care utilization and costs:

- Food-insecure patients in the top 10% of healthcare expenditures
- **Significantly more** ED visits, inpatient hospitalizations and number of days hospitalized
- **Higher rates** of outpatient visits
- Healthcare systems **challenged to address the social factors** that worsen the health for food-insecure patients
Identify: Comprehensive Geriatric Assessment
Gary and Mary West Senior Wellness Center

Food insecurity is a common problem for seniors who come to the wellness center seeking dental care.

Intervene and Evaluate: Oral Health and Malnutrition Risk
Gary and Mary West Senior Dental Center

A senior’s ability to achieve adequate nutrition is impacted by their oral health status.
Call to Action: Senior Malnutrition, A Silent and Costly Epidemic

- **Identify**: Screen for malnutrition and food insecurity across care settings
- **Intervene**: Address the full range of associated risks
- **Evaluate**: Develop, test and evaluate senior-appropriate care models across the care continuum

Q & A

[westhealth.org](http://westhealth.org) | @West Health

Contact: Brenda Schmitthenner, Senior Director, Successful Aging
bschmitthenner@westhealth.org
Maryland Statewide Malnutrition Data

Report Date: 9/14/2015

Number of Maryland beneficiaries with malnutrition codes* billed over a 5-year period from Q2-2013 to Q1-2018: 17,717

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<td>4,073</td>
<td>4,050</td>
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<td>4,322</td>
<td>4,353</td>
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<td>Discharges</td>
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<td>4,207</td>
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<td>4,542</td>
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<td>Readmissions</td>
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<td>ED visits per 1000 Beneficiaries</td>
<td>186.11</td>
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<td>Readmissions per 1000 Beneficiaries</td>
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<td>76.20</td>
<td>77.33</td>
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<td>Live Discharges Resident Within 30 Days</td>
<td>31.37%</td>
<td>32.06%</td>
<td>32.73%</td>
<td>33.40%</td>
<td>34.07%</td>
<td>34.74%</td>
<td>35.33%</td>
<td>35.97%</td>
<td>36.62%</td>
<td>37.27%</td>
<td>37.92%</td>
<td>38.57%</td>
<td>39.22%</td>
<td>39.87%</td>
<td>40.52%</td>
<td>41.17%</td>
<td>41.82%</td>
<td>42.47%</td>
<td>43.12%</td>
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**NOTES:**
In order to classify a Medicare FFS beneficiary as malnourished, all diagnosis positions in Part A and B claims were searched for relevant ICD-9/CPT codes* during the 3-year timeframe listed above. These beneficiaries were then matched to hospitalization data by their Medicare ID numbers to identify volume of admissions, discharges, readmits, ED visits and observation days during each quarter.

*Malnutrition codes include the following:
- Acute Protein-Energy Malnutrition [ICD-9 Code: 255.8; ICD-10 Code: E56.1]
- Unspecified Severe Protein-Calorie Malnutrition [ICD-9 Code: 254.7; ICD-10 Code: E56.5]
Maryland Statewide Malnutrition Data
Timeframe: Q2-2015 to Q1-2019

% of Discharges Readmitted Within 30 Days for Malnourished Beneficiaries in Maryland

Last year, quarterly average readmission rate for malnourished beneficiaries was 76.47%, as compared to a Maryland statewide average of 10.96%.

% of Discharges Readmitted Within 30 Days for Malnourished Beneficiaries in Maryland by Demographics (Q2-2017 to Q1-2018)

Special facility or AC surgery, 10%
Clinic or hospital-based renal dialysis facility, 16%
NHIA, 66%
GHF, 23%
Hospital, 22%

% Malnourished Beneficiaries Using Home Health Services
Last year, a quarterly average of 0.88% of malnourished beneficiaries used home health, as compared to a statewide population average of 2.77%.
Maryland Living Well Center of Excellence, MAC. Inc
Who We Are/What We Do

- Statewide License for Evidence-Based Behavior Change/Healthy Aging Programs
- Centralized referral, workforce certification, and HIPPA-compliant training and processes
- EBP workshops on MDH statewide calendar/registration/referral website
- Quarterly reports on patient activation, engagement, and long term goals
- Participant satisfaction/engagement and quality assurance monitoring
- Expanded consent to collect individual and population health outcomes
- Tracking of pre-/post- clinical measures
- Referrals to home and community-based services that address social determinants of health

Evidence-Based Programs
Stepping Up Your Nutrition Session Zero

- Joint collaboration between MAC LWCE, Maryland Department of Aging and Abbott Pharmaceuticals to develop curriculum
- Winner of ICAA Innovations Award 2017 and n4a Innovative Program Award 2018
- Identification of malnutrition and food insecurity risk
- Action plan for healthy nutrition shared with provider
- Pre/Post measure of knowledge, behavior change and handgrip strength

Target Population: Community-Dwelling Older Adults

Workshop 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
- Location of local resources for food/nutrition services
Stepping Up Your Nutrition Agenda

- How Nutrition Affects Falls
- Why Muscle Matters
- Nutrients to Know: Protein and Fluid
- Your Personal Nutrition Risk Score – Validated Assessment Tool
- Action Planning

Measuring Malnutrition Risk Level

<table>
<thead>
<tr>
<th>Nutrition Risk Level</th>
<th>Score Range</th>
<th>Action Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Nutrition Risk</td>
<td>Score below 50</td>
<td>Consult with your healthcare team as soon as possible to address the areas of nutrition concern and improve your nutrition status identify resources to help you reduce your risk.</td>
</tr>
<tr>
<td>Moderate Nutrition Risk</td>
<td>Score 50-54</td>
<td>Take Action to improve your nutrition health. Discuss options with your healthcare team and identify resources to help you reduce your risk.</td>
</tr>
<tr>
<td>Low Nutrition Risk</td>
<td>Score above 54</td>
<td>Keep up the good work! Your eating habits are working to keep you healthy and strong.</td>
</tr>
</tbody>
</table>
Stepping Up Your Nutrition Evaluation

- Documentation of Nutritional Risk Assessment
- Referral to provider/services for at risk individuals
- Referral to Food Banks and other community resources for food insecurity
- Screening for social determinants/social isolation
- Referral to appropriate evidence-based programs
- Pre/Post Knowledge and Behavior change Assessment (week 1 and week 7)
- Grip Strength measurement (week 1 and end of week 7); potential follow-up at 3 months
- Nutrition Risk, Grip Strength and Action Plan shared with provider

Stepping Up Your Nutrition Action Plan Ideas

___Weigh myself weekly
___Eat more protein
___Eat more fruits/vegetables
___Eat at least 3 meals a day
___Drink more fluid
___Eat with others
___Get help with shopping
___Try new foods
___Talk with my doctor or a dietitian about my nutrition concerns

MY PLAN for week:

- What I will do: ________________________________
- How much I will do: __________________________
- When I will do it: _____________________________
- How many times I will do it: ___________________
Early Results 149 participants – 8 counties

<table>
<thead>
<tr>
<th>NUTRITION PRACTICES</th>
<th>PERCENT</th>
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<tbody>
<tr>
<td>NEVER OR RARELY EAT WITH SOMEONE</td>
<td>12%</td>
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<tr>
<td>SOMETIMES HAVE PROBLEMS GETTING FOOD (HEALTH, INCOME, TRANSPORTATION, ETC.)</td>
<td>50%</td>
</tr>
<tr>
<td>FOOD DIDN'T LAST/NO FUNDS FOR MORE</td>
<td>10%</td>
</tr>
<tr>
<td>OFTEN SKIPPED MEALS</td>
<td>11%</td>
</tr>
<tr>
<td>SOMETIMES SKIPPED MEALS</td>
<td>78%</td>
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Pre-/Post- Change in Knowledge

- ID PROTEIN
- NUTRITION PREVENTS FALLS
- KNOW HOW MUCH FLUID
- UNDERSTAND MY RISK
MAC, Inc. – Maintaining Active Citizens Area Agency on Aging

Community-Based Interventions to Address Malnutrition

Goals for Community-Based Interventions to Reduce Malnutrition

* Stabilize or improve nutritional status

* Treatment of underlying causes (s)
Determine “Cause of Malnutrition”
Team Approach from AAA

* Hospital to Home Liaison
* Community Health Workers
* Home Delivered Meal Staff
* Registered Dietitian Nutritionist
* Registered Nurse
* Senior Center Staff
* Health and Wellness Coordinator

Objectives for Client: To stabilize or improve

* Nutritional Status
* Function
* Activities
* Quality of Life
**Treatment Options for Nutrition**

- Health benefits and income supports
- RDN for Nutrition Care Plan: education, meals
- Tiered meal plans based on level of need
- Add options for snacks or liquid supplements
- Food programs address food insecurity

**Community Food Assistance Programs**

- Homebound Delivered Meals
- Senior Center Meals
- Oral Nutritional Supplement Assistance
- Food Stamps
- Emergency and Monthly Food Pantry
- Hot Meal Programs
- Grocery and Restaurant Delivery
- Farmers Markets
Treatment Options to Improve Function

- PT/OT for self-feeding with special equipment
- Dental or SLP for mechanically altered meals
- Falls preventions workshops
- Evidenced based self-management programs

Treatment Options to Improve Activity

- Transportation access
- Housing options
- Adult day programs
- Physical activity programs
- Group dining options
Treatment Options to Improve Quality of Life

- Caregiver support
- Substance abuse referrals
- Socialization support
- Community volunteer opportunities
- Behavior health referrals

Communicate Progress

- Share client goals and action plans with healthcare
- Document communications and progress
- Assist with healthcare messages and clarification
- Schedule regular follow-up for high risk clients
IN THIS WEBINAR, YOU WILL:

• Recognize the impact and cost of malnutrition among community-dwelling older adults.

• Learn how to assess nutritional risk of community-dwelling older adults and encourage behavior changes to reduce risk/increase muscle strength.

• Increase your knowledge of potential malnutrition risk, steps to improve nutrition, and additional resources for referral.
PRESENTERS

Sue Lachenmayr
Maryland Living Well Center of Excellence
bslach@earthlink.net

Dr. Matthew Lee Smith
Texas A&M Center for Population Health and Aging
mls.health.1@gmail.com
Tell Us About You

You Role?

What City and State are You In?

PLEASE SHARE YOUR RESPONSE IN THE CHAT BOX
What is your primary reason for joining this webinar? Check all that apply

- I want to learn more about malnutrition in older adults
- I want to learn how to identify and reduce the risk of malnutrition in older adults
- I need programs and resources about malnutrition for our staff and volunteers
- I’m interested in increasing older adults’ awareness of malnutrition risk and empowering them to take steps to reduce their risk
- My reason is (type answer)
Maryland Living Well Center of Excellence, MAC, Inc. AAA

CHRONIC DISEASE SELF-MANAGEMENT EDUCATION PROGRAMS: BBC, CDSMP, CPSMP, CTS, DSMP, PSMP, Spanish CDSMP, Spanish DSMP, wCDSMP, CDSMP Toolkit
Increasing Awareness of Malnutrition Risk Among Community-Dwelling Older Adults

• Joint collaboration between MAC LWCE, Maryland Department of Aging (MDoA), and Abbott Nutrition to develop curriculum

• Winner
  • ICAA 2017 Innovations Award
  • N4A 2018 Innovations Award

• MDoA received ACL Nutrition Grant for leader training and workshop implementation to build statewide capacity
  • Identification of malnutrition and food insecurity risk
  • Action plan for healthy nutrition shared with provider
  • Pre-/Post measure of knowledge, behavior change and handgrip strength
Malnutrition among Older Adults

- Nutritional status among older individuals is a key predictor of frailty and Sarcopenia.\(^1\) Poor nutritional status is associated with the onset of frailty.

- Fallers are more often malnourished than non-fallers and fallers are almost twice as likely to be malnourished.

- Older adults who fall are malnourished and often experience a decline in health-related quality of life.

POLL: Who’s At Risk for Malnutrition

- Older adult who has lost weight without trying
- Older adult who is overweight
- Older adult who has recently been in the hospital
- Older adult who mostly eats alone
Why Worry About Older Adult Malnutrition?

• 1 in 2 older adults are at risk

• 300% increase in healthcare costs for those with poor nutritional status

• Malnourished individuals spend 4 to 6 days longer in the hospital

• In the U.S., we spend an estimated $51.3 billion for disease-associated malnutrition in older adults annually

• 60% of older adults in the hospital may be malnourished
POLL: Which of These Can Cause Malnutrition in Older Adults? (check all that apply)

- Living alone
- Medication side effects
- Depression
- Chronic Conditions
- Changing Taste Buds
Stepping Up Your Nutrition Workshop

Workshop Goal:
• Understand the importance of balanced nutrition for the prevention of falls and how to identify the key warning signs of poor nutrition

Key Messages: *Fluids & Protein throughout the day*
• Nutrition status and muscle health are linked to falls risk
• Exercise and protein are key factors to help maintain and build strong muscles
• How to take action and collaborate with your health care provider to reduce falls risk.
• How to find local resources for food/nutrition services
STEPPING UP YOUR NUTRITION (SUYN) 2-1/2 hour workshop can be

• Offered as a stand-alone group program
  • Curriculum can be offered in several smaller 30-45 minute sessions

• Paired with an Evidence-Based Program group program

• Provided in a one-on-one format over several brief sessions
MEASURING MALNUTRITION RISK LEVEL

High Nutrition Risk: Score > 50
Consult with healthcare team as soon as possible to address the areas of nutrition concern and improve nutrition status

Moderate Nutrition Risk: Score 50 to 54
Take action to improve nutrition health. Discuss options with healthcare team and identify resources to help reduce risk

No/Low Nutrition Risk: Score 55+
Continue current eating habits to keep healthy and strong
A Brief Video about SUYN

https://www.SteppingUpYourNutrition.com

To see video: GO TO WEBSITE AND CLICK ON THE STEPPING UP LOGO (middle of the page)
POLL: At what age do our bodies have the highest amount of muscle?

At what age do our bodies have the highest amount of muscle?
(Please click on the correct image)

- Age 15 to 24
- Age 25 to 40
- Age 41 to 55
Why is protein important to good nutrition?

Our protein needs increase as we age, especially when we are ill or hospitalized:

- Preserves muscle
- Helps us feel full
- Helps fight infections
- Helps heal injuries

Protein heals injuries

Our bodies need protein to heal injuries from falls, cuts and especially after we’ve had surgery or other medical procedures.
POLL: Which Food in Each Category Has the Greatest Amount of Protein?

Breakfast
- Scrambled Egg
- Apple Slices
- Greek Yogurt

Snacks
- Grapes, 1 cup
- Peanut butter, 2 tbsp.
- Pudding, low fat, 4 oz.

PLEASE SHARE YOUR RESPONSES IN THE CHAT BOX
Fluid and You

• Play an important role in your body.
• Help our bodies digest food, absorb nutrients, get rid of waste, prevent constipation, lubricate joints, protect organs, and help regulate body temperature.
• Needed to prevent dehydration, which can make you feel weak and dizzy.
• As we get older, we often lose our sense of thirst and don’t drink enough fluids. **Drink fluids with each meal and snack!**

**How much do you need?**
• 4 – 5 cups (32-40 oz.) with a balanced diet
• 6 – 8 cups (48-64 oz.) if your diet is low in fruits and vegetables
Brainstorm:
What are ways to get us to drink more fluid?

PLEASE SHARE YOUR RESPONSE IN THE CHAT BOX
STEPPING UP YOUR NUTRITION
Resources and Tools

- Documentation of Malnutrition and Food Insecurity Risk
  - Referral to provider/services for at risk individuals
  - Referral to Food Banks and other community resources for food insecurity
  - Screening for social determinants/social isolation
  - Referral to appropriate evidence-based programs

- Malnutrition Risk and Action Plan shared with provider

- Pre/Post Knowledge and Behavior Change Assessment, if offered in connection with an evidence-based falls prevention or self-management program.
To date, 505 participants reached by SUYN workshops

- 60+ trained SUYN leaders
- 35+ workshops delivered in 22 cities

Of the SUYN participants reached

- Average age 74.6 (±11.5) years; 35% age 80+
- 80% female
- 51% non-Hispanic White; 26% African American
- 70% live alone
SCREEN II – Nutritional Risk

- Average risk score 44.1 (±8.4)
  - 70% high nutrition risk
  - 20% moderate nutrition risk
  - 10% no/low nutrition risk

Fall-Related Risk

- 21% reported a recent fall
  - 48% of those who fell reported an injury
- 16% fearful of falling “a lot”
  - 27% fearful of falling “somewhat”

Nutrition Barriers and Meal Isolation

- 17% “never/rarely” eat with someone daily
- 17% “often/sometimes” ran out of food
- 53% “often/sometimes” skipped meals
STEPPING UP YOUR NUTRITION
Online Training
www.SteppingUpYourNutrition.com

1. An interactive skill-building approach that provides you with the learning and tools needed to implement this 2-1/2 hour workshop in your facility.
   - Used as a stand alone workshop or as a recruitment session for evidence-based programs
     - Matter of Balance, Stepping On (falls prevention)
     - Chronic disease self-management education (CDSME)

2. The training takes about 30 minutes to complete and includes:
   - Downloadable curriculum and extensive facilitator resources
   - Participant handouts
   - Optional surveys
   - Sample letter to primary provider
   - Link to free handgrip strength training and certification
   - 6-months of access to the website to receive additional materials about malnutrition risk
1. Visit the SUYN website
2. Click the Purchase Tab → Click Purchase
3. Add to Cart in the top right
4. Go to Cart
5. Enter Promo Code (25% off) = MoW_Discount
6. Complete transaction
QUESTIONS

Sue Lachenmayr
State Program Coordinator,
Maryland Living Well Center of Excellence (LWCE)

Matthew Lee Smith
Co-Director,
Texas A&M Center for Population Health and Aging
Evaluation Summary Report

Webinar Title: Reaching Older Adults Who May Not Know Their Risk of Malnutrition
Date: Tuesday, November 12, 2019
Presenter: Matthew Lee Smith and Sue Lachenmayr
Registered: 101
Attended: 51
Attendance Rating: 50%
Responded to Survey: 28 (55% response rate)

Please pick the phrase that closely aligns with your reasoning for registering for today's webinar. (N=28)

- 54% To improve my knowledge/skills on the topic
- 29% The topic was relevant to my work
- 11% To help me do my job better!
- 7% A colleague suggested I register.

Today's webinar met my expectations. (N=28)

- 31% Strongly Agree
- 54% Agree
- 12% Neither Agree nor Disagree (N=4)
- 3% Disagree

The presenter was knowledgeable about the topic. (N=28)

- 54% Strongly Agree
- 35% Agree
- 12% Neither Agree nor Disagree

The information shared on today's webinar was relevant to me/my program. (N=28)

- 42% Strongly Agree
- 50% Agree
- 8% Neither Agree nor Disagree (N=2)

I will be able to apply concepts from today's webinar to my work. (N=28)

- 31% Strongly Agree
- 54% Agree
- 15% Neither Agree Nor Disagree (N=4)

Participating in this webinar was worth my time. (N=28)

- 42% Strongly Agree
- 46% Agree
• 8% Neither Agree nor Disagree (N=3)
• 4% Strongly disagree (N=1)

What are the most meaningful ideas/concepts you learned? (N=10)

• Advising clients to eat more protein and drink more fluids is vital to their health.
• Falls are related to malnutrition. May increase fluid intake if not eating sufficient amount of fruits/veggies.
• I didn’t realize that older adults often feel less thirsty, leading to higher likelihood of dehydration
• The types of food to eat to get the most proteins for breakfast and lunch.
• To stress the importance of fluid and a variety of protein options every day for older adults and WHY - reducing frailty, risk of falls, healthcare costs, etc.
• Stepping Up Your Nutrition
• I enjoyed learning about a program that can be performed in various circumstances.
• The importance of educating older adults on the risks of malnutrition and how they can help to reduce it and be healthier. Sessions can be taught individually or as a group
• I could use this workshop as a Segway to recruit people for more in depth programs like Stepping on and Healthy eating for successful living
• The statistics that they found during their study was very eye-opening

When thinking about the older adults you serve, what is the priority level of addressing malnutrition? (N=28)

• 32% Extremely high
• 54% High
• 11% Moderate (N=3)
• 3% Low (N=1)

How likely are you to try to introduce SUYN to the older adults you serve? (N=28)

• 18% Extremely likely
• 50% Likely
• 25% Unlikely
• 7% Extremely unlikely (N=2)

How impactful do you think a program like SUYN would be for the older adults you serve? (N=28)

• 43% Extremely impactful
• 50% Somewhat impactful
• 7% Not impactful (N=2)

Please use this space for final questions, comments, kudos, etc.

• Thanks for sharing this information.
• I LOVED the interactive questions!! Best in most webinars I have experienced. Also, if you share fluids are a substitute for fruits and veggies, be specific as to WHICH fluids. Water/Coffee will not replace magnesium, folate, iron, etc.
• Thank you.
• Enjoyed all the speakers.
• This would be a good curriculum for MOW programs that do not have RDs and case workers who already go out and do nutrition referrals and counseling. I hesitate to have any person who is not an RD or DTR give nutrition counseling to clients because it is not always a case of increasing fluids and protein. There are a lot of health factors, and comorbidities that need to be taken into account.
• Great webinar. The course being interactive will be very helpful to allow older adult peers to share experiences and help them learn from each other.
Driving Consumer Demand for Evidence-Based Programs - What Works

From Idea to Implementation, Evaluation, and Impact

Judy Simon
Nutrition & Health Promotion Programs Manager
Maryland Department of Aging

Sue Lachenmayr
State Program Coordinator
Maryland Living Well Center of Excellence – MAC, Inc. AAA

Matthew Lee Smith
Co-Director
Texas A&M Center for Population Health and Aging
SESSION OBJECTIVES

• Learn and discuss various tools for evaluation of program outcomes and impact with have potential to enhance healthcare-AAA linkages.

• Provide input into strategies for online, interactive training components for integration into a program aimed at national implementation.
Stepping Up Your Nutrition – Session 0

IDEA
- Connecting malnutrition and falls risk
  - Educate older adults potential risk for malnutrition
  - Find experts (RDNs, health educators) to develop curriculum content
  - Identify validated tools to identify risk
  - Pilot early workshop
IMPLEMENTATION

- Determine leader eligibility requirements
  - Develop leader training agenda and materials
  - Interview leaders about training effectiveness
EVALUATION

• Identify program goals and key outcome measures
  ◦ Develop participant surveys
  ◦ Interview leaders about workshop effectiveness
Stepping Up Your Nutrition – Session 0

IMPACT

• Link Session 0 to evidence-based programs (chronic disease self-management and/or falls prevention workshops)

  ◦ Pre/post measures
    • Change in knowledge and handgrip strength
    • Change in nutrition practices (fluid intake, protein)
    • Successful action plans
Stepping Up Your Nutrition – Session 0

TO DATE

- 3 SUYN leader trainings hosted
  - 59 trained leaders
    - Most leaders already trained in another EBP
    - RDNs and RNs not trained receive ½ hour training in action planning, problem solving, and brainstorming

- 14 SUYN Session 0 hosted
  - 159 older adults engaged
    - Average age 72 years; 76% female
    - 21% moderate nutrition risk; 71% high nutrition risk
Stepping Up Your Nutrition – Session 0

NEXT STEPS

• Online, interactive training components for integration into a program aimed at national implementation Pre/post measures

• Statewide provider webinar about older adult malnutrition risk and available resources
SHARE YOUR IDEAS AND STRATEGIES FOR INCREASING CONSUMER DEMAND

CONTACT INFORMATION:

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judy.simon@maryland.gov
To date, 182 participants reached by SUYN workshops

**INTRODUCTION**

- Malnutrition: A lack of proper nutrition, caused by not having enough to eat, not eating enough of the right things, or being unable to use the food that one does eat
- One of every two older Americans is at risk for malnutrition
- Despite a cadre of evidence-based programs (EBP) available to older adults nationwide, few specifically focus on nutrition and malnutrition prevention
- Because EBP have defined implementation parameters and cannot be substantially altered, pairing brief interventions to EBP (as a Session Zero) is a promising strategy to introduce additional content and build relevant skills

**Session Zero for EBP**

- Non-required, information session offered prior to Session One as a marketing tool (or recruitment event)
- Provides an overview of the workshop, explains expectations for workshop participation, and confirms commitment of those interested in or have already registered for a workshop
- Opportunity to collect baseline data from participants to alleviate administrative burden on workshop instructors
- EBP workshops that include a Session Zero have significantly better participant retention (higher attendance)

**STUDY PURPOSES**

- To describe an innovative method of joining a brief intervention EBP to increase positive nutrition behavior among older adults and enhance EBP workshop attendance
  - Stepping On
  - Chronic Disease Self-Management Education Program

**STEPPING UP YOUR NUTRITION**

**Stepping Up Your Nutrition (SUYN)**

- 2.5-hour curriculum developed through a joint collaboration between MAC Living Well Center of Excellence, Maryland Department of Aging, and Abbott Pharmaceuticals
- Funded by the Administration for Community Living (ACL) for leader training and workshop implementation to build statewide capacity
- Target population: Community-dwelling older adults
  - Identify malnutrition and food insecurity risk
  - Create Action Plans for healthy nutrition
  - Assess knowledge, behavior change, and handgrip strength
- Objective:
  - 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:
  - Nutrition status and muscle strength are linked to falls risk
  - Exercise and protein are key to maintaining strong muscles
  - Location of local resources for food/nutrition services

**Agenda**

- How Nutrition Affects Falls
- Why Muscle Matters
- Nutrients to Know: Protein and Fluid
- Your Personal Nutrition Risk Score
- Action Planning

**Evaluation**

- Pre-/Post-test surveys
  - Baseline and after EBP workshop
  - Handgrip strength
- SCREEN II Tool (Seniors in the Community: Risk Evaluation for Eating and Nutrition): 16 items
  - High nutrition risk (total < 50)
  - Moderate nutrition risk (score 50 to 54)
  - No/lowlow nutrition risk (score 55+)

**RESULTS**

- To date, 182 participants reached by SUYN workshops
  - 60+ trained SUYN leaders
  - 18 workshops delivered
  - 16 sites in 13 cities
- Of the SUYN participants reached
  - Average age 74.9 (+9.4) years
  - 84% female
  - 22% reported a recent fall
  - 61% continued into a Stepping On workshop
  - 39% continued into a Chronic Disease Self-Management Education workshop

**SCREEN II – Risk at Baseline**

- Average risk score 44.3 (+8.2)
  - 72% high nutrition risk
  - 19% moderate nutrition risk
  - 9% no/lowlow nutrition risk

**CONCLUSIONS & NEXT STEPS**

- Linking a brief malnutrition prevention intervention to EBP can bolster basic nutrition skills among older adults to assist them gain stronger benefits from EBP
- With the vast majority of SUYN participants screening positive for high or moderate nutrition risk, this Session Zero has great potential for identifying at-risk older adults who would otherwise go undetected
- Growing statewide delivery infrastructure in preparation for national dissemination
- Collecting follow-up data to assess changes in nutrition risk over time and determine if SUYN can improve EBP attendance rates
- Developing online leader training to national scalability and uptake (to be available in 2019)

**Maryland Department of Aging**

**Maintaining Active Citizens**
Falling Through the Cracks: Reaching Older Adults at Risk of Malnutrition, Social Isolation and Depression

Maryland Living Well Center of Excellence (LWCE)
MAC, Inc. - Maintaining Active Citizens Area Agency on Aging
Leigh Ann Eagle, Executive Director
Sue Lachenmayr, State Program Coordinator
Who We Are; What We Do

CHRONIC DISEASE SELF-MANAGEMENT EDUCATION PROGRAMS
Maryland Living Well Center of Excellence (LWCE)

- MAC, Inc; Area Agency on Aging (AAA) for 4 rural counties on Maryland’s lower Eastern Shore

- In 2015, the Maryland Department of Aging designated as the Living Well Center of Excellence because of its successful implementation of evidence-based programs, and transferred the statewide license and database to LWCE.

- 2018 Chronic Disease Self-Management Education and 2019 Falls Prevention Administration for Community Living sustainability grantee
  - Partnership with Maryland AAAs
  - MD Hospitals
  - Collaboration with Chesapeake Regional Information System for Patients (CRISP) Maryland’s Health Information Exchange

- 2017 Administration for Community Living Innovations in Nutrition sub-grantee to the Maryland Department of Aging
  - Implementation and evaluation of the Stepping Up Your Nutrition Session Zero
  - Shelf-Stable Meal Pilot with two hospitals
LWCE Services

- Statewide Licenses
  - Chronic Disease Group Programs (English, Spanish, Worksite Programs), Diabetes (English, Spanish), Pain, Cancer, Building Better Caregivers
  - Falls Prevention Group Programs: Stepping On, Enhance Fitness Enhance Wellness
  - EnhanceWellness (individual chronic disease self-management)
  - PEARLS (individual depression Intervention)
- Learning collaborative and trainings for evidence-based program implementation
- Centralized referral, workforce certification, fidelity monitoring, privacy compliant training and processes
LWCE Services

- Screening for Social Determinants of Health (SDoH) and referral to appropriate services and evidence-based programs
- Statewide calendar for registration/referral to evidence-based program workshops
- Living Well website with tools, resources, marketing materials for participants, leaders and coordinators, and health care providers
- Quarterly reports on patient activation, engagement, and long-term goals
- Participant satisfaction/engagement and quality assurance monitoring of leader fidelity and competency
- Collection individual and population health outcomes
- Tracking of pre-/post-clinical measures
What the Research Tells Us

- Nutrition is a key factor in the high prevalence and incidence of mental disorders and is as important to psychiatry as it is to cardiology, endocrinology, and gastroenterology.
- Many studies have also shown associations between healthy eating and a reduced prevalence of and risk for depression and suicide across cultures and age groups.
- Poor nutrition is often an underlying factor and aggravator behind many types of mental illnesses, including depression.

https://psychcentral.com/news/2015/02/02/diet-nutrition-closely-linked-to-mental-health/80661.html
The Connection Between Food and Mental Health

- Why is a meal important for someone with behavioral health issues?
  - Food intake (or lack thereof) can mimic/exacerbate behavioral health conditions
  - Medications may need to be taken with food
  - Depression and other mental illness may increase risk of social isolation

- Strategies to identify malnutrition in older adults/people with disabilities who have behavioral health conditions
  - Assess potential malnutrition risk at hospital discharge, home visits
  - Screen for risk of social isolation and depression via home-delivered meals
  - Identify Social Determinants of Health gaps/barriers

- Provide programs and services to address risks
Older Adult Malnutrition

1 in 2 older adults at risk

300% increase in healthcare costs for those with poor nutritional status

4 to 6 days longer in the hospital

$51.3 billion in costs for disease-associated malnutrition in older adults annually

60% of older adults in hospitals may be malnourished
The Problem

Nearly 1 in 5 adults over age 50 is at risk of social isolation.

The health risks of prolonged isolation are equivalent to smoking 15 cigarettes a day.

The Health Risks of Isolation and Loneliness
- High Blood Pressure
- Heart Disease
- Diabetes
- Weakened Immune system
- Sleep Problems
- Depression and Anxiety
- Alcohol & Pain Medication abuse
- Cognitive Decline, Dementia
The list goes on...

Isolated and lonely older adults have a higher risk of:
- Needing long-term care
- Increased ER visits
- Becoming a victim of fraud
- Becoming a victim of elder abuse
- Dying early
- MALNUTRITION

Medicare spends more on isolated older adults:
$1608 per person each year
Totaling $6.7 billion annually

AARP Foundation
Cost and Impact of Depression

- According to the Centers for Disease Control and Prevention (CDC), “Depression is a treatable medical condition, not a normal part of aging, however, older adults are at increased risk for experiencing depression.”

- More than two million of the 34 million Americans age 65 and older suffer from some form of depression.

- Depressive Symptoms Are Associated With Higher Rates of Readmission or Mortality After Medical Hospitalization.

- Older patients with symptoms of depression have roughly 50% higher healthcare costs than non-depressed seniors.


3. Jenelle L. Pederson, MSc1, Lindsey M. Warkentin, MSc2, Sumit R. Majumdar, MD, MPH1,3, Finlay A. McAlister, MD, MSc1,4, Journal of Hospital Medicine Vol 11 | No 5 | May 2016

Social Determinants of Health Screening

In the last 12 months, did you eat less than you felt you should because there wasn’t money for food?

In the last 12 months, has your utility company shut off your service for not paying your bills?

Are you worried that in the next 2 months, you may not have stable housing?

Do you have difficulty in taking the medicine/prescriptions prescribed by your doctor?

In the last 12 months, have you needed to see a doctor but could not because of cost?

In the last 12 months, did you go without health care because you didn’t have a way to get there?

I see or talk to family members at least once a week.

I see or talk to friends at least once a week.

On a weekly basis I participate in social activities or attend organized groups, such as choirs, support groups, cultural performances, group meals, exercise classes, etc.

Do you ever need help reading or understanding hospital or other materials from your physician?

Are you afraid you might be hurt in your apartment building or house?

In the past three months, have you had a fall?    If you fell in the past 3 months, how many times did it limit your regular activities for at least a day or you saw a doctor.   #________

In the past two weeks, have you had little interest or pleasure in doing things or felt down, depressed or hopeless?
<table>
<thead>
<tr>
<th>Care Planning</th>
<th>Maryland Access Point (MAP)</th>
<th>No Wrong Door Information &amp; Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>Nutrition counseling, education and care planning; Meal programs delivered to homes or senior centers; Community food resources, meal enhancements and nutritional supplements</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>Application for financial aid - SNAP, Medicaid, State Health Improvement Program (SHIP), energy-assistance programs, income-tax assistance, Medicare prescriptions, and Part B premiums; Medication and supplement grants</td>
<td></td>
</tr>
<tr>
<td>In-Home Care</td>
<td>Assistance with in-home care, sitsers list, assisted living subsidies, Community First Choice; Telephone reassurance; Options Counseling</td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td>Medication management Assistance for dental, eye care, and hearing aids</td>
<td></td>
</tr>
<tr>
<td>Social Support</td>
<td>Senior centers (exercise, socialization); Support groups (Alzheimer, caregivers, stroke, renal); Lifelong learning; Volunteer opportunities; Senior employment</td>
<td></td>
</tr>
<tr>
<td>Environmental Assistance</td>
<td>Counseling on housing and assisted living; Education about local transportation systems; Training for assistive technology equipment &amp; adapted telephones; Ramp assistance</td>
<td></td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>Self-management Programs: Chronic disease, diabetes self-management; cancer thriving and surviving; Diabetes prevention program; Malnutrition workshop: Stepping Up Your Nutrition; Fall-prevention workshops Stepping ON, OTAGO; Depression care management: PEARLS</td>
<td></td>
</tr>
</tbody>
</table>
SOLUTION 1: STEPPING UP YOUR NUTRITION
Malnutrition Community-Based 2-1/2 Hour Workshop

Workshop Goal: Understand the importance of balanced nutrition for the prevention of falls and how to identify the key warning signs of poor nutrition.

Key Messages:

- Nutrition status and muscle health are linked to falls risk
- Exercise and protein are key factors to help maintain and build strong muscles
- How to take action and collaborate with your health care provider to reduce falls risk.
- How to find local resources for food/nutrition services
### Jan 1 - Dec 31 2018: 290 Participants
29 Workshops, 10 Counties

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race, Ethnicity</td>
<td>AA 34%</td>
</tr>
<tr>
<td>Live alone</td>
<td></td>
</tr>
<tr>
<td>Age 70 - 89</td>
<td></td>
</tr>
<tr>
<td>Unintentional weight loss</td>
<td></td>
</tr>
<tr>
<td>Eat one or more meals with someone</td>
<td>Sometimes 43%</td>
</tr>
<tr>
<td>Difficulty getting groceries</td>
<td>Sometimes 23%</td>
</tr>
<tr>
<td>Food just didn’t last, no $ for more</td>
<td>Sometimes 11%</td>
</tr>
<tr>
<td>Skip meals</td>
<td>Sometimes 44%</td>
</tr>
<tr>
<td>Have someone to eat healthy meals with</td>
<td>Sometimes 50%</td>
</tr>
</tbody>
</table>
SUYN Early Success and Next Steps

- The International Council on Active Aging® (ICAA) August, 2017 ICAA Innovators Achievement Award
- National Association of Area Agencies on Aging (n4a) 2018 Aging Innovations Award in July 2018
- Transition from in-person to online interactive training available soon
## Solution 2: PEARLS Depression and Social Isolation Intervention

### Chronic Disease Self-Management Participants N = 517

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>26%</td>
</tr>
<tr>
<td>Disabilities</td>
<td>63%</td>
</tr>
<tr>
<td>Average age</td>
<td>65-74</td>
</tr>
<tr>
<td>African American</td>
<td>43%</td>
</tr>
<tr>
<td>Medicare/Medicaid</td>
<td>69%/13%</td>
</tr>
<tr>
<td>Live Alone</td>
<td></td>
</tr>
</tbody>
</table>

### PEARLS Participants N = 47

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remission of depressive symptoms</td>
<td>60%</td>
</tr>
<tr>
<td>Reduced Depression</td>
<td>33%</td>
</tr>
<tr>
<td>Average age</td>
<td>70-79</td>
</tr>
<tr>
<td>African American</td>
<td>33%</td>
</tr>
<tr>
<td>Income below $15,000</td>
<td>41%</td>
</tr>
</tbody>
</table>
Stories From the Field: Providing Programs for older adults with depression

Miss P

- Lost spouse a few years ago
- Current mood sad, overwhelmed, and constantly crying
- Only left apartment for doctor’s appointments and occasional family gatherings
- No current physical activities
- Relapsed last October
- Improved mood after PEARLS sessions to laughter, smiles, and just a few tears
- Increased Social Activities started dating, has friends come over frequently, and plays in the pool
- Joined MAC gym and congregate meals program
Stories From the Field: Providing Programs for older adults with depression

Miss S

- Referred by PCP
- First Session: after reviewing medication list it was noticed she had been prescribed 2 (two) antidepressants of the same class
- Clinical Supervisor was informed and confirmed that is was rare for medications to be taken together
- Could present a safety risk to the client
- Contacted PCP office and the nurse spoke to the client and gave proper instructions on taking her psychotropic medications
- PEARLS program is almost complete and there are no incidents
Based on national figures for hospital length of stay/ED visits of $1,152 per person, Maryland’s per participant cost for CDSME programs was $219, providing cost savings of $935 per person, resulting in a return on investment of 427% and saving Maryland over $1,700,000.

Referrals from regional hospital’s transitional care nurses to EBP has resulted in reduction in readmissions.

Implementing Living Well with Hypertension and CDSME demonstrates controlled hypertension at an estimated cost savings per patient $460.

Depression Screening and enrollment into PEARLS resulted in an average $1100 savings in health care costs per patient.
STEPPING UP YOUR NUTRITION: BUILDING AWARENESS AND ACTION TO REDUCE FALL RISK

Maryland Living Well Center of Excellence – MAC, Inc.
Leigh Ann Eagle, Executive Director
Sue Lachenmayr, State Program Coordinator
Matthew Lee Smith, Texas A&M University (evaluator)
CHRONIC DISEASE SELF-MANAGEMENT EDUCATION PROGRAMS: BBC, CDSMP, CPSMP, CTS, DSMP, PSMP, Spanish CDSMP, Spanish DSMP, wCDSMP, CDSMP Toolkit

Living Healthy with High Blood Pressure
**WHY OLDER ADULT MALNUTRITION?**

<table>
<thead>
<tr>
<th>1 in 2 older adults at risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>300% increase in healthcare costs for those with poor nutritional status</td>
</tr>
<tr>
<td>4 to 6 days longer in the hospital</td>
</tr>
<tr>
<td>$51.3 billion in costs for disease-associated malnutrition in older adults annually</td>
</tr>
<tr>
<td>60% of older adults in hospitals may be malnourished</td>
</tr>
</tbody>
</table>
Nutritional status in elderly individuals is a key predictor of both frailty and Sarcopenia.\(^1\) Poor nutritional status is associated with the onset of frailty.

- Fallers are more often malnourished than non-fallers and fallers are almost twice as likely to be malnourished.

- Older adults who fall are malnourished and often experience a decline in health-related quality of life.

CAUSES OF MALNUTRITION IN OLDER ADULTS

- 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
INCREASING AWARENESS OF MALNUTRITION RISK AMONG COMMUNITY-DWELLING OLDER ADULTS

- Joint collaboration between MAC LWCE, Maryland Department of Aging and Abbott Pharmaceuticals to develop curriculum
- Winner of ICAA Innovations Award 2017
- MDoA ACL Nutrition Grant funding for leader training and workshop implementation to build statewide capacity
- Identification of malnutrition and food insecurity risk
- Action plan for healthy nutrition shared with provider
- Pre-/Post measure of knowledge, behavior change and handgrip strength
Workshop Goal: Understand the importance of balanced nutrition for the prevention of falls and how to identify the key warning signs of poor nutrition.

Key Messages:

- Nutrition status and muscle health are linked to falls risk
- Exercise and protein are key factors to help maintain and build strong muscles
- How to take action and collaborate with your health care provider to reduce falls risk.
- How to find local resources for food/nutrition services
MEASURING MALNUTRITION RISK LEVEL

High Nutrition Risk: Score > 50
Consult with healthcare team as soon as possible to address the areas of nutrition concern and improve nutrition status

Moderate Nutrition Risk: Score 50 to 54
Take action to improve nutrition health. Discuss options with healthcare team and identify resources to help reduce risk

No/Low Nutrition Risk: Score 55+
Continue current eating habits to keep healthy and strong
STEPPING UP YOUR NUTRITION EVALUATION

- Documentation of Malnutrition and Food Insecurity Risk
  - Referral to provider/services for at risk individuals
  - Referral to Food Banks and other community resources for food insecurity
  - Screening for social determinants/social isolation
  - Referral to appropriate evidence-based programs

- Pre/Post Knowledge and Behavior Change Assessment (week 1 and end of week 7)

- Grip Strength measurement (week 1 and end of week 7); potential follow-up at 3 months

- Malnutrition Risk, Grip Strength, and Action Plan shared with provider
As of March 2019, 320 participants reached by SUYN workshops

- 60+ trained SUYN leaders
- 35 workshops delivered in 22 cities

Of the SUYN participants reached

- Average age 74.5 (±11.4) years; 36% age 80+
- 80% female
- 51% non-Hispanic White; 26% African American
- 58% live alone
SCREEN II – Nutritional Risk

- Average risk score 43.7 (±8.4)
- 73% **high** nutrition risk
- 20% **moderate** nutrition risk
- 7% **no/low** nutrition risk

Fall-Related Risk

- 20% reported a recent fall
  - Half of those who fell reported an injury
- 17% fearful of falling “a lot”
  - 27% fearful of falling “somewhat”

Nutrition Barriers and Meal Isolation

- 17% “never/rarely” eat with someone daily
- 17% “often/sometimes” ran out of food
- 53% “often/sometimes” skipped meals
After attending SUYN workshops

- 34% Stepping On
- 18% Chronic Disease Self-Management Education (CDSME)
- 48% no class

On average, higher workshop attendance after SUYN workshops

- Stepping On (5.1 sessions vs. 5.0 sessions)
- CDSMP (4.2 sessions vs. 3.9 sessions)
- DSMP (4.8 sessions vs. 4.4 sessions)
- CPSMP (4.8 sessions vs. 4.4 sessions)
ONLINE STEPPING UP YOUR NUTRITION TRAINING

Malnutrition Among Older Adults

Protein heals injuries
Our bodies need protein to heal injuries from falls, cuts and especially after we’ve had surgery or other medical procedures.

At what age do our bodies have the highest amount of muscle?
(Please click on the correct image)

- Age 15 to 24
- Age 25 to 40
- Age 41 to 55
Like what you heard? Share it!

Tweet using #AgeAction2019 or #WeAgeWell

Rate the session and speakers on the mobile app

Vote in the conference poll
Roadmap for Defeating Malnutrition: Collaborative Models for Identification, Treatment and Prevention

American Society on Aging Conference
April 18, 2019
Introductions

What is Malnutrition? Why is it an Important Issue for Older Adults?

Statewide and Local Initiatives:
- Maryland
- Ohio
- Meals on Wheels of Central TX
- Philadelphia Corporation for Aging

Defeat Malnutrition Today Coalition and the Blueprint for Achieving Malnutrition Care for Older Adults

Facilitated Q/A & Complete Your Action Plan
What is malnutrition?

Malnutrition is the inadequate intake of nutrients, particularly protein, over time and may contribute to chronic illness and acute disease or illness and infection.

Two or More of the Following*

- Weight loss
- Insufficient food intake
- ↓ Body fat
- ↓ Muscle
- Reduced handgrip
- Fluid

- Often associated with general physical wasting
- Linked to chronic disease
- Individuals with malnutrition may be underweight, normal weight, overweight or even obese

Why Older Adult Malnutrition?

- 1 in 2 older adults at risk
- 300% increase in healthcare costs for those with poor nutritional status
- 4 to 6 days longer in the hospital
- $51.3 billion in costs for disease-associated malnutrition in older adults annually
- 60% of older adults in hospitals may be malnourished
Hidden Co-Morbidity


**Maryland**

**ANNUAL ESTIMATED MEDICAL COST:**

$340,440,992

That equals roughly $55 per person

**COST FOR ADDRESSING MALNUTRITION IN THESE 8 COMMON CONDITIONS:**

- **10%** • Impaired Immunity (infections)
- **20%** • Decreased Healing
- **30%** • Pressure Ulcers
- **40%** • At Risk of Death (pneumonia)
Causes of Malnutrition in Older Adults

- 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
Innovations in Nutrition Grant*

Initiatives

*Administration for Community Living Grant # 90INNU0002
Goal – Address Malnutrition

Post-Discharge Meals Program

- 12 days, shelf stable, medically tailored
- Hospitals select at-risk patients, measure outcomes
- Partners: Maryland Food Bank, Bethesda NEWtrition, MAC Inc (AAA), University of Maryland Hospital St Joseph’s and Medical Center, Peninsula Regional Medical Center, Atlantic General Hospital.

Peer Network for Post Discharge Meals Programs

- Slack network
- Quarterly calls/webinars (ending Sept 2019 – new home?)
- 50 national members. Interested? Contact laura.sena@Maryland.gov

Community-Based Malnutrition Care Pathway

- 4 AAA Pilot Sites
- Community-based Aging Network Toolkit
- Community Malnutrition Awareness Workshop
- Partners: MAC, Inc., AAA pilot sites.

Enhanced Testing of Home Delivered Meal Prioritizing Tool

- Cognitive Interviews & Multi-State Validation with “App” Development
- Partner: University of Maryland
Aging Network Approaches Solutions by Addressing Social Determinants of Health = Malnutrition Care Pathway
What’s in your Box?

Boxes either contain:

- Carb-Controlled, Heart-Healthy meal plan
- Enhanced Healing meal plan

Each patient only gets one type of meal plan.

Use the Patient Selection Flowsheet to help you determine which meal plan is right for your patient.

Provide tote bags to the patients

Each patient gets four (4) bags total (12 days of food) – an initial set of bags at discharge and the remainder at follow-up.

Day 1
Day 2
Day 3
Day 4
Day 5
Day 6

Your patient will either get a Carb-Controlled, Heart-Healthy or an Enhanced Healing meal package plan.

Here are the differences between the two:

**Carb-Controlled, Heart-Healthy**
- Calorie range 1500 – 1700 per day
- Carbohydrates are 45-55% of total calories in accordance with the adult Dietary Reference Intake*
- Carbohydrates are spread evenly between meals.
  - Meals are about 3-4 carb choices each and snacks are 1-2 carb choices.
- Moderate total fat (25 – 33% of total calories)
- Adequate protein for maintaining muscle (18 – 20% of total calories)
- Sodium is under 2,000 mg per day

**Enhanced Healing**
(high energy & high protein)
- Higher calories for medical conditions that use more energy (1900 – 2500 Calories per day)
- Adequate protein for maintaining muscle (over 100 grams per day)
- No restrictions on fat, carbohydrates, or sodium

**Additional information for both meal package plans:**

- Easy to prepare. Requires:
  - Spreading with a knife
  - Opening a can
  - Pulling off a cap
  - Mixing
  - Puncturing with a straw
  - Pulling open a package

- Additional kitchen items required:
  - Water
  - Bowls & plates
  - Forks, knives & spoons
  - Can opener
  - Microwave
  - Optional: scissors (if patient has difficulty opening packages)

https://www.nal.usda.gov/ndb/reports/dri/
## HDM Priority

<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  
Food insecure | 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. |

- Statewide, mandatory. Average 5 minutes.
- Ensures limited services to most in need.
- Includes USDA food insecurity questions and asks about ability to shop for and prepare meals.
- Divert others to more appropriate service(s).
- Identifies needed services – new programs and/or new partnerships.
- Assists with describing clients we serve.
- Mobile app to allow for easy re-assessment and data recording.

Maryland Living Well Center of Excellence

CHRONIC DISEASE SELF-MANAGEMENT EDUCATION PROGRAMS

Living Healthy with High Blood Pressure

Stepping On Building Confidence and Reducing Falls
Increasing Awareness of Malnutrition Risk Among Community-Dwelling Older Adults

• Joint collaboration between MAC LWCE, Maryland Department of Aging and Abbott Pharmaceuticals to develop curriculum
• Winner of ICAA Innovations Award 2017
• MDoA ACL Nutrition Grant funding for leader training and workshop implementation to build statewide capacity
• Identification of malnutrition and food insecurity risk
• Action plan for healthy nutrition shared with provider
• Pre-/Post measure of knowledge, behavior change and handgrip strength
STEPPING UP YOUR NUTRITION 2-1/2 Hour Workshop Paired with Evidence-Based Programs

**Workshop Goal:** Understand the importance of balanced nutrition for the prevention of falls and how to identify the key warning signs of poor nutrition.

**Key Messages:**

- Nutrition status and muscle health are linked to falls risk
- Exercise and protein are key factors to help maintain and build strong muscles
- How to take action and collaborate with your health care provider to reduce falls risk.
- How to find local resources for food/nutrition services
Measuring Malnutrition Risk Level

High Nutrition Risk:
Score below 50
Consult with your healthcare team as soon as possible to address the areas of nutrition concern and improve your nutrition status. Identify resources to help you reduce your risk.

Moderate Nutrition Risk:
Score 50-54
Take Action to improve your nutrition health. Discuss options with your healthcare team and identify resources to help you reduce your risk.

Low Nutrition Risk:
Score above 54
Keep up the good work! Your eating habits are working to keep you healthy and strong.
Stepping Up Your Nutrition Evaluation

- Documentation of Malnutrition and Food Insecurity Risk
  - Referral to provider/services for at risk individuals
  - Referral to Food Banks and other community resources for food insecurity
  - Screening for social determinants/social isolation
  - Referral to appropriate evidence-based programs

- Pre/Post Knowledge and Behavior change Assessment (week 1 and end of week 7)

- Grip Strength measurement (week 1 and end of week 7); potential follow-up at 3 months

- Malnutrition Risk, Grip Strength and Action Plan shared with provider
### Jan 1 2018 – Mar 20 2019: 290 Participants
29 Workshops, 10 Counties

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live alone</td>
<td>90%</td>
</tr>
<tr>
<td>Age 70 - 89</td>
<td>91%</td>
</tr>
<tr>
<td>Race, Ethnicity</td>
<td>AA 34% Caucasian 66%</td>
</tr>
<tr>
<td>Eat one or more meals with someone</td>
<td>Sometimes 43% Never 14%</td>
</tr>
<tr>
<td>Difficulty getting groceries</td>
<td>Sometimes 23% Often 3%</td>
</tr>
<tr>
<td>Food just didn’t last, no $ for more</td>
<td>Sometimes 11% Often 2%</td>
</tr>
<tr>
<td>Skip meals</td>
<td>Sometimes 44% Often 3%</td>
</tr>
<tr>
<td>Have someone to eat healthy meals with</td>
<td>Sometimes 50% Rarely 14%</td>
</tr>
<tr>
<td>Unintentional weight loss</td>
<td>20%</td>
</tr>
</tbody>
</table>
SUYN Early Success and Next Steps

• The International Council on Active Aging® (ICAA) August, 2017 ICAA Innovators Achievement Award

• National Association of Area Agencies on Aging (n4a) 2018 Aging Innovations Award in July 2018

• Transition from in-person to online interactive training available soon
Roadmap for Defeating Malnutrition: Ohio’s Quality Improvement Strategy
Ohio Malnutrition Prevention Commission

• Full report provided 18 key recommendations addressing malnutrition in the older adult in Ohio
  • Education and Awareness
  • Data and Evaluation
  • Prevention Models: Team Based Care
## Older Adults in Ohio

<table>
<thead>
<tr>
<th>Year</th>
<th>Counties with Populations &gt;20% of 60+ Years of Age</th>
<th>Counties with Populations &gt;20% of 60+ Years of Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>28</td>
<td>60</td>
</tr>
<tr>
<td>2020</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>2030</td>
<td>0</td>
<td>88</td>
</tr>
</tbody>
</table>

Source: Scripps Gerontology Center 2015, Ohio 60+ Population 2010-2030
Malnutrition in Ohio

RISK FACTORS FOR MALNUTRITION

- Lack of Food
- Embarrassment
- Mental Health
- Social Isolation
- Depression
- Chronic Diseases
- Repeated Hospitalization
- Financial Constraints
- Poverty
- Food Insecurity

- About 33% of older adults admitted to the hospital may be malnourished.
- Up to 50% of community-dwelling older adults may be malnourished.
- Malnutrition can increase healthcare costs by 300%.

Source: Meals on Wheels, 2017
Food Insecurity

“The limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.” - USDA Definition

• In 2015 – 12.7% of all US households were food insecure
• Can occur from (as it relates to malnutrition):
  • Hunger or limitation of food
  • Lack of nutritious or safe foods
  • Abnormal eating patterns
• Those experiencing food insecurity
  • Don’t have enough food
  • Struggle to afford balanced meals
  • Cut the size of meals or skip meals
  • Eat less than they should
  • Lose weight

Food Insecurity

- American Hospital Association recommendations
  - Screen for food insecurity
  - Educate patients about available federal nutrition programs
  - Connect patients and families with RDN’s for counseling services
  - Provide free food or healthy snacks at clinics or on-site food pantries
  - Promote existing resources including food trucks, food shelters, community kitchens, etc
  - Collaborate with grocery stores and farmers markets

Key Report Recommendations

8. Integrate malnutrition care goals, such as malnutrition screening, assessment, education, and interventions, in local population health planning, such as chronic disease plans that are supported by data included in community health needs assessments.

11. Encourage hospitals to review current patient admission and discharge processes for inclusion of malnutrition and food insecurity screening. Use a validated nutrition screening tool to screen within 24 hours of admission to identify at risk or malnourished patients.
Goal: to improve malnutrition care in our community

Convener: Healthcare Collaborative of Greater Columbus (HCGC)

“to improve the quality, delivery and affordability of healthcare for all people in the Columbus region”

Initial meeting with multiple stakeholders in spring 2018

Brainstormed on which of the Commission’s recommendations partners would want to implement.
HCGC Quality Improvement

Screening for nutrition risk and food insecurity selected for quality improvement activity.

Participants brought various tools for discussion.

Key questions:

Can this easily be implemented as a screening, from different provider perspectives?

Will patients understand, be empowered by this tool?

How will we measure screenings, and ultimately outcomes for the patient?
### Nutrition and Food Insecurity Screening

#### Questions 1 & 2

<table>
<thead>
<tr>
<th>Question 1: Have you recently lost weight without trying?</th>
<th>Score of 0-1</th>
<th>Score of 2 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Patient is not at risk for malnutrition; screen again in 1 year.</td>
<td>Patient is at risk for malnutrition and needs a referral to dietetic services ongoing to monitor nutrition.</td>
</tr>
<tr>
<td>Not Sure</td>
<td>Patient should be referred to meal services and/or a foodbank/food pantry and monitored every 6 months.</td>
<td>Patient is food insecure and needs meal/pantry services immediately.</td>
</tr>
<tr>
<td>Yes (if yes, how much weight have you lost?)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-13 lbs</td>
<td>0 or 1</td>
<td>2 or more</td>
</tr>
<tr>
<td>14-23 lbs</td>
<td>2 or 2</td>
<td>3 or more</td>
</tr>
<tr>
<td>24-33 lbs</td>
<td>3 or 3</td>
<td>4 or 4</td>
</tr>
<tr>
<td>34 lbs or more</td>
<td>4 or 4</td>
<td>5 or 5</td>
</tr>
<tr>
<td>Unsure</td>
<td>2 or 2</td>
<td>3 or more</td>
</tr>
</tbody>
</table>

#### Questions 3 & 4

<table>
<thead>
<tr>
<th>Question 2: Have you been eating poorly because of decreased appetite?</th>
<th>Score of 0</th>
<th>Score of 1-2</th>
<th>Score of 3 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Patient should be referred to meal services and/or a foodbank/food pantry and monitored every 6 months.</td>
<td>Patient is food insecure and needs meal/pantry services immediately.</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 or 1</td>
<td>2 or 2</td>
<td>3 or more</td>
</tr>
<tr>
<td>Sometimes</td>
<td>1 or 1</td>
<td>2 or 2</td>
<td>3 or more</td>
</tr>
</tbody>
</table>

#### Grand Total of Questions 1-4

<table>
<thead>
<tr>
<th>Score</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 or more</td>
<td>Provider should not let the patient leave without a food Rx and dietetic consult scheduled.</td>
</tr>
</tbody>
</table>
Logistics of Implementation

- Develop pilot program for testing
- Utilize a primary care partner
- Electronic capture of screening data
- Develop referral processes
  - Food banks and other meal resources
  - Dietitians and providers to address nutrition risk and provide intervention
    - Grocery store RD’s
    - Meals on wheels program RD’s
Develop an Educational Toolkit

• Toolkit is key for education
  • Malnutrition facts and data
  • Prevalence in the hospital and community settings
  • Food insecurity facts
  • Screening tool and how to administer
  • Malnutrition posters and web-based video
  • Listing of RD’s available for consultation
  • Listing of food banks in the community
Follow Up Metrics

For Partnering Entities

- Number of times screening tool used/total patients over 65 seen
- Number of times patient screened positive for At Risk/total screened patients
- Number of referrals made for “At Risk” patients (RD and Foodbank)
- Number of completed referrals/total referrals made

For Hospitals

- Number of patients screened for senior malnutrition/total patients over 65 seen
- Number of times patient screened positive/total screened patients
- Number of patients discharged with malnutrition screen results/total positive screened patients
Next Steps

- Finalize the screening tool and implementation plan
- Finalize toolkit and available resources
- Provide webinar training
- Collect quality improvement data
- Move forward with broad based implementation
- Partner with other care providers and hospital systems
- Expand to other key cities in Ohio
Our Mission

Meals on Wheels Central Texas seeks to **nourish** and **enrich** the lives of the homebound and other people in need through programs that **promote dignity** and **independent living**.
OUR PROGRAMS

MEALS ON WHEELS
Nutritious, home-delivered meals
Volunteers delivered 565,127 meals!

HOME REPAIR
Major home repairs/maintenance done by professionals
178 homes transformed into safer places to live!

IN-HOME CARE
Assistance with the everyday activities of daily living
200,652 hours of in-home care provided!

SENIOR CENTERS
Meals and activities at local senior centers
109,260 congregate meals provided!

CASE MANAGEMENT
Designed to fit specific needs of clients, including technology assistance
9,450 hours of case management provided!

PALS
Pet food and medical care for our clients’ pets
37,712 pounds of dog and cat food delivered!

MIKE’S PLACE
Respite and activity center for those with Alzheimer’s or dementia
3,567 hours of fun and respite provided!

GROCERIES TO GO
Grocery and prescription shopping assistance
8,189 volunteer hours dedicated to helping clients!

BREAKFAST MEALS
Additional meals for those who are food insecure
Clients received 42,860 breakfast meals!

COUNTRY WHEELS
Home-delivered meals for those living in rural areas
30,091 meals delivered to rural clients!

HANDY WHEELS
Safety-related minor home improvements and repairs
849 jobs completed!

HOPE
Shelf-stable groceries for our most at-risk clients
94,307 lbs. of food delivered!

*All statistics from FY2018
# Our Marquee Program - MEALS

## MTMS (Medically-Tailored Meals)

- Chronic Disease Self-Management
- General Health
- Diabetes-Friendly
- Heart Healthy
- Renal-Friendly
- Digestive-Friendly

*Soft and Pureed versions for each are available

## CHOICE MEAL PROGRAM

- Increasing Satisfaction
  - Beef or chicken?
  - Turkey or Vegetarian?

Clients decide—promoting dignity and independence!
Current Demographics

- >2700 active homebound clients
- ~968 active congregate participants
- Waiting list <100
- ~70% over 65 years of age
- ~88% live below 200% FPL
- 52% live alone
- Average time on program 3 years
Physiological Changes w/ Aging, Psychosocial, and Social Factors
Malnourishment

• Affects:
  • Independent living
  • Healthy aging
  • Severity of chronic conditions and disabilities

• Leads to:
  • Vulnerable immune systems
  • Poor wound healthy capacity
  • Physical disability
  • Poor quality of life
  • Higher health care and societal costs

What we know

- Nutrient Intake is lower in homebound population
- HDM Meal contributes markedly to the participants’ intake

But do we improve malnourishment status?
Using the MNA
An evidence-based approach
Measuring Success-- Impact
**Mini Nutritional Assessment (MNA)**

**Screening**

A. Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?
- 0 = severe decrease in food intake
- 1 = moderate decrease in food intake
- 2 = no decrease in food intake

B. Weight loss during the last 3 months
- 0 = weight loss greater than 3 kg (6.6 lbs)
- 1 = weight loss greater than 1 and 3 kg (2.2 and 6.6 lbs)
- 2 = no weight loss

C. Mobility
- 0 = bed or chair bound
- 1 = able to get up from bed or chair but does not go out
- 2 = goes out

D. Has suffered psychological stress or acute disease in the past 3 months?
- 0 = yes
- 2 = no

E. Neuropsychological problems
- 0 = severe dementia or depression
- 1 = mild dementia
- 2 = no psychological problems

F1. Body Mass Index (BMI) (weight in kg) / (height in m)
- 0 = BMI less than 19
- 1 = BMI 19 to less than 21
- 2 = BMI 21 to less than 23
- 3 = BMI 23 or greater

F2. Calf circumference (in cm)
- 0 = CC less than 31 cm
- 3 = CC 31 cm or greater

**Screening score (max. 14 points)**

12 - 14 points: Normal nutritional status
8 - 11 points: At risk of malnutrition
0 - 7 points: Malnourished

---

65+ ONLY

- Food intake and weight loss
- Frailty/Functionality
- Hospitalization
- Depression & dementia
- Body composition
Mini Nutritional Assessment (MNA)

• Full MNA validated & considered Gold Standard (MDs assessments, biochemical, anthropometrics)

• Extensively tested for validity, sensitivity, specificity, reliability

• MNA validated & has high specificity, sensitivity, and diagnostic accuracy

• MNA most appropriate for elderly community setting (when compared with other tools)

Before Meals
~MNA~

Hot Meals delivered by volunteers

After 3 mo. of Meals
~MNA~
2 out of 3 new Meals on Wheels clients who were malnourished or ‘at risk’ improved in just 3 months
Meals on Wheels program shown to significantly improve nutrition status
USDA food security questionnaire
an evidence-based approach

Prioritizing Resources and Measuring Success
Food Insecurity (FI)

• Contributes to malnutrition

• FI is now also being associated with greater subsequent health care expenditures in the US

• FI older adults eat fewer nutrients and are more likely to:
  • Be in poor health
  • Suffer from depression
  • Have limitations when it comes to activities of daily living-- a strong predictor of institutionalization and is one of the greatest threats to the ability of older adults to live independently

• From 2001-2016, the number of food insecure seniors increased by 200% representing rates higher than before the Great Recession in 2007

• # of FI older adults will increase by 50% in 2025
USDA Food Security Questionnaire

• Food bought didn’t last and didn’t have money to get more
• Couldn’t afford to eat balanced meals
• Ever cut the size of or skip meals because there wasn’t enough money for food (how often)
• Eat less than you felt you should because wasn’t enough money for food
• Every hungry because there wasn’t enough money for food
Scoring Guide

0 = High Food Security

1 = Marginal Food Security

2-4 = Low Food Security

5-6 = Very Low Food Security

Eligibility for our Breakfast Meal Program

Prioritize the most food insecure (5-6)
Before Meals
~USDA FSQ~

Hot Meals delivered by volunteers

One Year Later
~USDA FSQ~
MOWCTX Applicants who are Food Insecure

65%
AWAITING RESULTS

Improving Food Security?
Blueprint for Defeating Malnutrition

Philadelphia Corporation for Aging (PCA)
Learned about DMT Campaign at N4a Conference 2017

Instantly knew PCA wanted to lead this campaign, why?

- Bring awareness to the senior issue
- Lack of association of hunger with seniors
- Connect people to resources
271,658 Elderly in Philadelphia

23% are Considered Low Income (62,481)

1 in 2 Older Adults are at Risk

Numbers higher for Seniors in Health Care Settings
In Hospitals We Know

• 300% Increase in Healthcare Costs for those with Poor Nutritional Status
• 4 to 6 Days Longer in a Hospital
• 33% of Older Adults in Hospitals may be Malnourished
• Sub Goal
  - Address Impact of Isolation on Seniors
  - The High Health Cost from Social Isolation in Elderly
Year One - Internal

- Created PCA Committee
- Every Department Represented

Mission Statement

- The mission of the Defeat Malnutrition Today Philadelphia Coalition’s is to eliminate malnutrition among Philadelphia seniors through education, collaboration and advocacy.
PROCESS

• Staff Awareness
  - I-Net
  - EBB
  - Articles
  - PCA Website
Day Long Event – 04/20/18

Food Panel – Agencies We Work With

- Philabundance
- Shared Food Program
- Coalition Against Hunger
- Aid for Friends
EVENTS AT SENIOR CENTERS

• 11 Home Grown Nutrition Programs Sponsored with Local Farmer’s Markets

• Food Voucher Distributions

• Food and Nutrition Demonstrations
STAFF FOOD DRIVE

- 2019 MLK Day of Service
  - In less than 2 weeks collected over 20 boxes of food equivalent to over 500 lbs.
Save the Date

Help to Defeat Malnutrition among Philadelphia Seniors!

You are invited to join the Defeat Malnutrition Today: Philadelphia Coalition, a collaborative citywide effort to address food insecurity and malnutrition among our city’s older adults through proactive health care strategies, education, and advocacy.

Please save the date for the inaugural meeting:

Tuesday, March 19
2:30 to 4 p.m.
at Philadelphia Corporation for Aging (PCA)
642 N. Broad St., Philadelphia

Bring your ideas for how we can work together to defeat senior malnutrition in the city!

PCA will provide parking and refreshments.

Questions? Contact Lauren Ring at lauren.ring@pcaCares.org.
YEAR TWO - EXTERNAL

Created and Expanded Coalition Membership

Date Set
- March 19th (Flyer)

124 Organizations Invited

Goal
- Build a Network of Service Providers and Local Agencies Committed to the Mission and Goals
YEAR TWO - EXTERNAL

Attendees Included

- 3 - Government Agencies
- 11 - Hospitals/Acute Care Facilities
- 26 - Senior Centers
- 10 - Educational Institutions

- 1 - Housing Authority
- 5 - Aging Organizations
- 2 - Senior Law
- 3 - Community Mental Health
- 1 - Veterans
ADDITIONAL ATTENDEES INCLUDED

- United Way
- Salvation Army
- 3 - Grocery Stores
- 6 - MCO’s + Health Care Providers
- Benefits Data Trust
- Health Promotion
- Council Pew Foundation

124 Invited
77 Attended
62% of Invitees
KEYNOTE SPEAKER

BOB BLANCATO

National Coordinator
Director for Defeat Malnutrition Today

- Goals and Strategies of the National Blueprint

- Advancing Policies for Quality Malnutrition Care in Older Adults through State Actions

- National Coalition and its Work
A Discussion on Funding Challenges at the Federal Level

Concentrated work efforts within the 3 Sub Committees

- *Where the bulk of the work will be done*
- Awareness and Advocacy
- Ensures that Malnutrition and Hunger among older adults is not overlooked by the media, government agencies or funders of programs and services
- Advocate on behalf of older adults suffering from malnutrition or hunger
• To improve the ability of residents and community-based organizations to identify and refer elders suffering from hunger or malnutrition to resources that can help

  o Identify/compiling local resources and services

  o Helping to build innovative, locally tailored referral processes that can be used to help hard to reach elders
COMMUNITY LEVEL EDUCATION

- Provide information to identify Malnutrition/Hunger among the elderly
- How/Where To Get Screened
  - Philly Food Finder
  - PCA Senior Centers
  - MOW (Home Delivered Meals can cut the need for Hospital Care)
  - Creating Malnutrition Intervention/Referral Methods for Citywide use
  - Expand distribution sites for SFMNP Voucher Distribution Campaign
HEALTHCARE NETWORK

- Improve ability of Healthcare Networks
  - To identify and refer Elders suffering from Hunger/Malnutrition to appropriate supportive services and other Non-Medical Resources
  - Train Hospital Gatekeepers
- Each Subcommittee has 2 Co-Chairs and a Recording Secretary
03/19/19
First Large Event
Huge Success
NEXT STEPS

• Work with Committees to Identify
  - Goals/Projects
  - Define Success
  - Document Process
  - Replicability
Contributing Factors of Malnutrition among Older Adults Illustrate the Need for a Coordinated, Comprehensive Solution
Achieving These Goals Requires Action Today

Several important steps can be taken immediately to improve malnutrition care across the care continuum.

The Blueprint recommendations highlight cross-cutting actions for key healthcare stakeholders:

1. National, state, and local government agencies
2. Healthcare practitioners, healthcare institutions, and medical professional societies
3. Individuals, families, caregivers, patient advocacy groups, and aging organizations
4. Public and private payers
Implementing the *Blueprint*’s recommendations requires **collaboration across these various sectors** as well.

Without collaborative work going forward, it will be impossible to **implement comprehensive solutions** to the crisis of older adult malnutrition, which is what this issue requires—a **coordinated, carefully integrated approach**.
Goals of the Blueprint

Blueprint is for understanding malnutrition and goals to combat it:

- Goal 1: Improve Quality of Malnutrition Care Practices
- Goal 2: Improve Access to High-Quality Malnutrition Care and Nutrition Services
- Goal 3: Generate Clinical Research on Malnutrition Quality of Care
- Goal 4: Advance Public Health Efforts to Improve Malnutrition Quality of Care
defeatmalanutrition.today...vital to healthy aging
About the Coalition

Coalition of almost 90 national, state, and local stakeholders and organizations, including community, healthy aging, nutrition, advocacy, healthcare professional, faith-based, and private sector groups

Share the goal of achieving the recognition of malnutrition as a key indicator and vital sign of older adult health risk; work to create policy change toward a greater emphasis on screening, detecting, treating and preventing malnutrition.
Activities and Highlights

- Released the National Blueprint: Achieving Quality Malnutrition Care for Older Adults and a State Legislative Toolkit
- Held numerous national webinars
- Worked with CMS on malnutrition electronic clinical quality measures
- Presentations at state, national and international conferences
- Requested a GAO report on federal nutrition programs
- Malnutrition Awareness Week participation by Sens. Casey, Murray, and Kaine, and Reps. Bonamici, DeLauro, Jenkins, Torres and Beatty
- Passage of a Farm Bill reauthorization, including the Casey-Collins Nourishing Our Golden Years Act
- Additional increases for Older Americans Act nutrition programs
Thank You!
Questions?
Session Presenters

**Louis Colbert**, MSW, Vice President of Operations, Philadelphia Corporation for Aging. [Louis.Colbert@pcacares.org](mailto:Louis.Colbert@pcacares.org), 215-765-9000 ext 5715.

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**Ainsley Malone**, MS, RD, LD, CNSC, FASPEN, Nutrition Support Dietitian, Columbus, Ohio; Clinical Practice Specialist, American Society for Parenteral and Enteral Nutrition (ASPEN). [ainsleym@nutritioncare.org](mailto:ainsleym@nutritioncare.org), 614-783-4014.

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**Najja Orr**, MBA, Chief Strategy Officer, Philadelphia Corporation for Aging. [Najja.orr@pcacares.org](mailto:Najja.orr@pcacares.org), 215-765-9000 ext 5079.

**Meredith Ponder Whitmire**, JD, Vice President, Matz, Blancato & Associates. [mponder@matzblancato.com](mailto:mponder@matzblancato.com) 202-789-0470.

**Judy Simon**, MS, RD, LDN, Nutrition and Health Promotion Programs Manager, Maryland Department of Aging. [Judy.simon@Maryland.gov](mailto:Judy.simon@Maryland.gov) 410-767-1090.
SIMPLE STEPS TO LIVE LONGER AND STRONGER: STEPPING UP YOUR NUTRITION (SUYN)

Leigh Ann Eagle
Executive Director, Maryland Living Well Center of Excellence (LWCE)

Sue Lachenmayr
State Program Coordinator, Maryland Living Well Center of Excellence (LWCE)

Matthew Lee Smith
Co-Director, Texas A&M Center for Population Health and Aging
MARYLAND LIVING WELL CENTER OF EXCELLENCE – MAC, INC.

CHRONIC DISEASE SELF-MANAGEMENT EDUCATION PROGRAMS: BBC, CDSMP, CPSMP, CTS, DSMP, PSMP, Spanish CDSMP, Spanish DSMP, wCDSMP, CDSMP Toolkit
Nutritional status among older individuals is a key predictor of frailty and Sarcopenia.¹ Poor nutritional status is associated with the onset of frailty.

Fallers are more often malnourished than non-fallers and fallers are almost twice as likely to be malnourished.

Older adults who fall are malnourished and often experience a decline in health-related quality of life.

INCREASING AWARENESS OF MALNUTRITION RISK AMONG COMMUNITY-DWELLING OLDER ADULTS

- Joint collaboration between MAC LWCE, Maryland Department of Aging (MDoA), and Abbott Pharmaceuticals to develop curriculum

- Winner
  - ICAA 2017 Innovations Award
  - N4A 2018 Innovations Award

- MDoA received ACL Nutrition Grant for leader training and workshop implementation to build statewide capacity
  - Identification of malnutrition and food insecurity risk
  - Action plan for healthy nutrition shared with provider
  - Pre-/Post measure of knowledge, behavior change and handgrip strength
<table>
<thead>
<tr>
<th>Why Older Adult Malnutrition?</th>
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</thead>
<tbody>
<tr>
<td>1 in 2 older adults at risk</td>
</tr>
<tr>
<td>300% increase in healthcare costs for those with poor nutritional status</td>
</tr>
<tr>
<td>4 to 6 days longer in the hospital</td>
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<tr>
<td>$51.3 billion in costs for disease-associated malnutrition in older adults annually</td>
</tr>
<tr>
<td>60% of older adults in hospitals may be malnourished</td>
</tr>
</tbody>
</table>
CAUSES OF MALNUTRITION AMONG OLDER ADULTS

- 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
Workshop Goal: Understand the importance of balanced nutrition for the prevention of falls and how to identify the key warning signs of poor nutrition.

Key Messages: *Fluids & Protein throughout the day*

- Nutrition status and muscle health are linked to falls risk
- Exercise and protein are key factors to help maintain and build strong muscles
- How to take action and collaborate with your health care provider to reduce falls risk.
- How to find local resources for food/nutrition services
**MEASURING MALNUTRITION RISK LEVEL**

**High Nutrition Risk: Score > 50**
Consult with healthcare team as soon as possible to address the areas of nutrition concern and improve nutrition status.

**Moderate Nutrition Risk: Score 50 to 54**
Take action to improve nutrition health. Discuss options with healthcare team and identify resources to help reduce risk.

**No/Low Nutrition Risk: Score 55+**
Continue current eating habits to keep healthy and strong.
STEPPING UP YOUR NUTRITION EVALUATION

- Documentation of Malnutrition and Food Insecurity Risk
  - Referral to provider/services for at risk individuals
  - Referral to Food Banks and other community resources for food insecurity
  - Screening for social determinants/social isolation
  - Referral to appropriate evidence-based programs

- Pre/Post Knowledge and Behavior Change Assessment (week 1 and end of week 7)

- Optional Grip Strength measurement (week 1 and end of week 7)

- Malnutrition Risk, Grip Strength, and Action Plan shared with provider
STEPPING UP YOUR NUTRITION
PARTICIPANT CHARACTERISTICS

To date, 505 participants reached by SUYN workshops
- 60+ trained SUYN leaders
- 35+ workshops delivered in 22 cities

Of the SUYN participants reached
- Average age 74.6 (±11.5) years; 35% age 80+
- 80% female
- 51% non-Hispanic White; 26% African American
- 70% live alone
SCREEN II – Nutritional Risk

- Average risk score 44.1 (±8.4)
  - 70% high nutrition risk
  - 20% moderate nutrition risk
  - 10% no/low nutrition risk

Fall-Related Risk

- 21% reported a recent fall
  - 48% of those who fell reported an injury
- 16% fearful of falling “a lot”
  - 27% fearful of falling “somewhat”

Nutrition Barriers and Meal Isolation

- 17% “never/rarely” eat with someone daily
- 17% “often/sometimes” ran out of food
- 53% “often/sometimes” skipped meals
After attending SUYN workshops

- 37% Stepping On
- 14% Chronic Disease Self-Management Education
- 49% no evidence-based program (stand alone)

On average, older adults who participated in SUYN workshops had **statistically significantly** higher Stepping On workshop (P = 0.030)

- Stepping On Attendance (of 7 workshop sessions)
  - **With SUYN** = 5.3 sessions (77% successful completion)
  - **Without SUYN** = 4.9 sessions (69% successful completion)
ONLINE STEPPING UP YOUR NUTRITION TRAINING

Malnutrition Among Older Adults

Protein heals injuries

Our bodies need protein to heal injuries from falls, cuts and especially after we've had surgery or other medical procedures.

At what age do our bodies have the highest amount of muscle?
(Please click on the correct image)

- Age 15 to 24
- Age 25 to 40
- Age 41 to 55
BRAINSTORM:
WHAT DO YOU LIKE MOST ABOUT FOOD?

PLEASE SHARE YOUR RESPONSE
IN THE CHAT BOX
WHY IS PROTEIN IMPORTANT TO GOOD NUTRITION?

Our protein needs increase as we age, especially when we are ill or hospitalized:

Protein
- Preserves muscle
- Helps us feel full
- Helps fight infections
- Helps heal injuries
**WHICH FOOD HAS THE GREATEST AMOUNT OF PROTEIN? 1 = MOST**

<table>
<thead>
<tr>
<th>#1-3</th>
<th>BEVERAGES</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td>8 oz.</td>
<td></td>
</tr>
<tr>
<td>Soda, Pepsi</td>
<td>8 oz.</td>
<td></td>
</tr>
<tr>
<td>Ensure, Protein Shake</td>
<td>8 oz.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#1-3</th>
<th>BREAKFAST</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrambled Egg</td>
<td>1 Egg</td>
<td></td>
</tr>
<tr>
<td>Apple Slices</td>
<td>1 Apple</td>
<td></td>
</tr>
<tr>
<td>Greek Yogurt</td>
<td>6 oz.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#1-3</th>
<th>LUNCH OR DINNER</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuna Sandwich</td>
<td>3 oz. Tuna</td>
<td></td>
</tr>
<tr>
<td>Lettuce Salad (no toppings), with Dressing</td>
<td>1 cup Lettuce</td>
<td></td>
</tr>
<tr>
<td>Baked Beans</td>
<td>½ cup</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>#1-3</th>
<th>SNACKS</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grapes</td>
<td>1 cup</td>
<td></td>
</tr>
<tr>
<td>Peanut Butter</td>
<td>2 tbsp.</td>
<td></td>
</tr>
<tr>
<td>Pudding, Low-Fat</td>
<td>4 oz.</td>
<td></td>
</tr>
</tbody>
</table>
FLUID AND YOU

- Fluids play an important role in your body.
- Fluids help our bodies digest food, absorb nutrients, get rid of waste, prevent constipation, lubricate joints, protect organs, and help regulate body temperature.
- Fluids are needed to prevent dehydration, which can make you feel weak and dizzy.
- As we get older, we often lose our sense of thirst and don’t drink enough fluids. *Drink fluids with each meal and snack!*

- How much do you need?
  - 4 – 5 cups (32-40 oz.) with a balanced diet
  - 6 – 8 cups (48-64 oz.) if your diet is low in fruits and vegetables
BRAINSTORM:
WHAT ARE WAYS TO GET US TO DRINK MORE FLUID?

PLEASE SHARE YOUR RESPONSE
IN THE CHAT BOX
A role play is used to provide participants information on the importance of good nutrition before they take the assessment.

As you listen to Mary’s Visit to the Doctor...

- Identify some of Mary’s good eating habits that can help keep her healthy?
- Identify some of Mary’s eating habits that put her at risk of poor nutrition?
- Enter your observations in the CHAT box
<table>
<thead>
<tr>
<th>Food Needs</th>
<th>Program Name</th>
<th>Contact Number</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homebound: meal delivery</td>
<td>Meals-on-Wheels by LifeCare Alliance</td>
<td>(614) 278-3130</td>
<td>Serves adults (60+) who are homebound and live in Franklin, Marion or Madison counties</td>
</tr>
<tr>
<td>Serves lunch at dining center</td>
<td>Senior Dining Centers by LifeCare Alliance</td>
<td>(614) 278-3153</td>
<td>Serves adults (60+) nutritious lunches at various dining centers throughout Franklin, Marion, Madison, Champaign and Logan counties</td>
</tr>
<tr>
<td>Volunteer picks up groceries or prepares meal</td>
<td>Help-at-Home by LifeCare Alliance</td>
<td>(614) 278-3130</td>
<td>Serves homebound adults. A caring volunteer can help with groceries and/or meal preparation</td>
</tr>
<tr>
<td>Gives out local farm-fresh produce</td>
<td>Ohio Senior Farmer's Market Program by LifeCare Alliance</td>
<td>(614) 437-2865</td>
<td>Serves low-income older adults (60+) and allows them to get local produce within central Ohio</td>
</tr>
<tr>
<td>Weekly groceries</td>
<td>Kroger Community Pantry</td>
<td>(614) 317-9487</td>
<td>Serves low-income adults with a mix of non-perishable products, frozen meats, dairy products, fresh produce and an assortment of breads. Need photo ID, and proof of residency</td>
</tr>
<tr>
<td>Monthly box of groceries</td>
<td>Senior Food Box Program by Second Harvest Food Bank</td>
<td>(440) 960-2265 ext:313</td>
<td>Serves low-income older adults (60+)</td>
</tr>
<tr>
<td>Homebound: meal and nutritional supplements</td>
<td>Franklin County Senior Options</td>
<td>(614) 525-6200</td>
<td>Serves older adults (60+)</td>
</tr>
<tr>
<td>Assistance with food stamp process</td>
<td>Food Stamps (SNAP) by Community Action</td>
<td>(413) 475-1570</td>
<td>Helps low-income adults receive food stamps</td>
</tr>
</tbody>
</table>
SUYN ONLINE TRAINING

www.SteppingUpYourNutrition.com

1. An interactive skill-building approach that provides you with the learning and tools needed to implement this 2-1/2 hour workshop in your facility.
   - Used as a stand alone workshop or as a recruitment session for evidence-based programs such as Matter of Balance, Stepping On (falls prevention).
   - Used as a recruitment session before chronic disease self-management programs.

2. The training takes about 30 minutes to complete and includes:
   - Downloadable curriculum and extensive facilitator resources
   - Participant handouts
   - Optional surveys
   - Sample letter to primary provider
   - Link to handgrip strength training and certification
   - 6-months of access to the website to receive additional materials about malnutrition risk
1. Visit the SUYN website
2. Click the Purchase Tab → Click Purchase
3. Add to Cart in the top right
4. Go to Cart
5. Enter Promo Code (25% off) = VoA_Discount
6. Complete transaction
QUESTIONS

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