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Executive Office of Elder Affairs
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2018 COMMISSION ON MALNUTRITION PREVENTION AMONG OLDER ADULTS ANNUAL REPORT

DECEMBER 2018

An Act establishing a commission on malnutrition prevention among older adults

SECTION 1. Chapter 19A of the General Laws is hereby amended by adding the following section:-

Section 42 There shall be with the department a commission on malnutrition prevention among older adults. The commission shall consist of the secretary of elder affairs or a designee, who shall serve as chair, the commissioner of public health or a designee, the commissioner of transitional assistance or a designee, the commissioner of agricultural resources or a designee, the senate and house chairs of the joint committee on elder affairs or their designees and 9 persons to be appointed by the governor, 1 of whom shall be a physician, 1 of whom shall be a university researcher, 1 of whom shall be a community-based registered dietitian or nutritionist working with an Older Americans Act-funded program, 1 of whom shall be a representative of a hospital or integrated health system, 2 of whom shall be nurses working in home care, 1 of whom shall be a registered dietitian or nutritionist working with a long-term care or assisted living facility, 1 of whom shall be a registered dietitian or nutritionist representing the Massachusetts Dietetic Association and 1 of whom shall be a representative from the Massachusetts Association of Councils on Aging, Inc.

The commission shall make an investigation and comprehensive study of the effects of malnutrition on older adults and of the most effective strategies for reducing it. The commission shall monitor the effects that malnutrition has on health care costs and outcomes, quality indicators and quality of life measures on older adults. The commission shall: (i) consider strategies to improve data collection and analysis to identify malnutrition risk, health care cost data and protective factors for older adults; (ii) assess the risk and measure the incidence of malnutrition occurring in various settings across the continuum of care and the impact of care transitions; (iii) identify evidence-based strategies that raise public awareness of older adult malnutrition including, but not limited to, educational materials, social marketing, statewide campaigns and public health events; (iv) identify evidence-based strategies, including community nutrition programs, used to reduce the rate of malnutrition among older adults and reduce the rate of re-hospitalizations and health care acquired infections related to malnutrition; (v) consider strategies to maximize the dissemination of proven, effective malnutrition prevention interventions, including community nutrition programs, medical nutrition therapy and oral nutrition supplements, and identify barriers to those interventions; and (vi) examine the components and key elements of clauses (i) to (v), inclusive, consider their applicability and develop strategies for pilot testing, implementation and evaluation.

The commission shall file a report annually on its activities and on any findings and recommendations to the house and senate chairs of the joint committee on elder affairs and chairs of the senate and house committees on ways and means not later than December 31.

MEMBERSHIP

2018/2019 MPC Members

Representing	Current Appointee
Secretary of the Executive Office of Elders Affairs (EOEA), Designee (Chair)	Carole Malone Co-Chair Shirley Chao Co-Chair Amy Sheeley Secretary
Commissioner of Public Health, Designee	Diana M. Hoek
Commissioner of Transitional Assistance (Designee)	Brittany Mangini Penny McGuire
Commissioner of Agricultural Resources (Designee)	Rebecca Davidson
Member of the House of Representatives (Designee)	Representative Elizabeth Poirier
Member of the House of Representatives (Designee)	Representative Danielle W. Gregoire
Member of the Senate (Designee 1)	Mary Giannetti
Member of the Senate (Designee 2)	Linnea L. Hagberg
Physician	Dr. Sarah Phillips
University Researcher	Helen Rasmussen
Community-based registered Dietitian or Nutritionist Working With Program Funded by Older Americans Act	Margery Gann
Rep. of a Hospital of Integrated Health System	Kris M. Mogensen
Nurse Working In Home Care 1	Milaina Mainieri
Nurse Working In Home Care 2	Myclette Theodule
Registered Dietitian or Nutritionist Working with Long-Term Care	Dalia Cohen
Registered Dietitian or Nutritionist Representing MA Dietetic Association	Tara Hammes
Rep. from MA Association of Councils on Aging, Inc.	Pamela Hunt

In 2018, the Malnutrition Prevention Commission (MPC) members offered constructive suggestions relating to policy changes. EOEA is grateful to them for their time, energy, dedication and commitment.

RECOMMENDATIONS

Data Collection and Management

Recommendation 1

Massachusetts Executive Office of Elder Affairs will require all Area Agencies on Aging (AAA), Aging Service Access Point (ASAP) and nutrition service providers to include the Malnutrition Screening Tool (MST) (Attached) in their intake process.

Recommendation 2

Encourage health care, primary care and other providers working in a spectrum of settings such as assisted living facilities, community health centers and other outpatient settings, and food banks to use the MST at intake to identify their clients/patients with high malnutrition risk.

Recommendation 3

Encourage hospital discharges to flag “malnutrition risk” and refer to nutrition counseling in community organizations (e.g., ASAP) using Academy of Nutrition and Dietetics MQII discharge protocol¹.

Public Awareness

Recommendation 4

Introduce legislation to establish an annual Massachusetts Older Adult Malnutrition Awareness Week in May to align with the national Older Americans Month.

Recommendation 5

Encourage healthcare stakeholders to collaborate on conducting the Malnutrition Awareness Campaign at state legislative gatherings and community health promotion events.

Recommendation 6

Encourage all member agencies to publish and promote evidence-based malnutrition resources designed for older adults, care providers and professionals via websites, social media and printed materials such as newsletters.

Dissemination and Best Practices

Recommendation 7

Recommend national research centers or academic institutions to conduct and publish evidence-based malnutrition research as it becomes available.

Recommendation 8

Encourage community organizations and health care providers to conduct Medical Nutrition Therapy (MNT) to treat malnutrition.

REVIEW OF PAST YEAR AND PROCESS FOR FORMULATING RECOMMENDATIONS

Meeting 1:

The MPC met on **February 13, 2018** on the 23rd floor of One Ashburton Place. The meeting focused on exploring the health and malnutrition status of Massachusetts as well as national malnutrition prevention movements.

- EOEА Secretary Alice Bonner opened the meeting and greeted members. She stressed the importance of the MPC to older adults in the Commonwealth and noted that malnutrition has a direct impact on all aging issues including economic security, dementia, end-of-life care and fall prevention. Secretary Bonner challenged the Commission to use its collective expertise to make recommendations that will reduce the risk of malnutrition and enhance the well-being of seniors in Massachusetts.
- Robert Blancato, Executive Director of the national Defeat Malnutrition Today Coalition, Robert Blancato, gave an overview of the National Blueprint: Achieving Quality of Care for Older Adults and recommended that the Commission use the State Legislative Toolkit for outreach purposes and establish a relationship with federal, state and local governments.
- Holly Greuling RDN ACL/AOA, a senior national nutritionist, presented on Older Adult’s Nutrition Needs and Continuum of Care, including how to identify malnutrition in older adults and Older American’s Act (OAA) nutrition programs related to food security and malnutrition.

- Jeanne Blankenship, MS, RDN, Vice President, Policy Initiatives and Advocacy, Academy of Nutrition and Dietetics presented on the Malnutrition Quality Improvement Initiative (MQii) including the importance of malnutrition care after hospital discharge, as well as ER patients who may be malnourished.
- Kris M. Mogensen, MS, RD-AP, LDN, CNSC Chair, Malnutrition Committee, ASPEN presented “Making Optimal Nutrition a National Standard” which included ASPEN’s mission, malnutrition initiatives and goals to raise awareness around advancing the science and building infrastructure for older adults as well as Malnutrition Awareness week.
- Co-chair Shirley Chao, PhD, RD, LDN, FAND presented on health conditions and statistics of Massachusetts elders. This included food security, oral health, chronic disease and the high rate of hospital readmission in the state, as well as how many seniors rely extensively on meal programs due to limited food resources.
- Co-chair EOEIA Assistant Secretary Carole Malone discussed how this Commission’s work supplements the mission of MA Governor’s Council on Aging and the positive impact of the six other states (TX, FL, GA, LA, OH, NM) that joined MA to establish resolutions on malnutrition.
- There was a discussion about the important contributions of the state departments- DTA, DAR, DPH and EOEIA and the Legislature to the Commission.
- EOEIA’s current efforts were presented including the statewide MNT Project, a standardized nutrition counseling form, and efforts to incorporate malnutrition assessment protocols and provide tools and training to community nutritionists for malnutrition assessment.
- Corey Testa, the Research Director & Legal Counsel for the Joint Committee on Elder Affairs, discussed House Bill S.4116: an Act relative to Alzheimer’s and related dementias in the Commonwealth, including how possible malnutrition components such as a training program for ER providers (physicians and nurses) can be implemented.
- Mary Giannetti, from Haywood Hospital, mentioned that the Massachusetts’s Health Policy Commission has been focused on addressing behavioral health/substance use issues as a way to reduce emergency department revisits and hospital readmissions and noted malnutrition screening, assessment, and treatment could be looked at as a way to reduce revisit and admission rates, in particular among older adults
- Representative Elizabeth Poirier (North Attleboro) discussed the problem of seniors isolated in the community and the need to link them to services.

The Malnutrition Commission members decided to divide into two working groups: Data Collection and Management and Public Awareness, based on member’s expertise and preference. The work groups agreed to participate in conference calls and report back to the Commission. The full Commission membership agreed to meet in Boston three additional times over the course of the year.

Data Collection and Management Work Group

Goals: (1) Consider the strategies needed to improve data collection and analysis to identify malnutrition risk; (2) assess the risk and measure the incidence of malnutrition occurring in various settings across the continuum of care and the impact of care transitions.

Membership: Mary Giannetti (group leader), Helen Rasmussen, Kris M. Mogensen, Milaina J, Mainieri, Dalia Cohen, Linnea Hagberg and Tara Hammes

Public Awareness Work Group

Goals: (1) Identify evidence-based strategies that raise public awareness of older adult malnutrition; (2) evaluate strategies used by community nutrition programs.

Membership: Diana Hoek (group leader), Brittany Mangini, Corey Testa, Pam Hunt, Elizabeth Poirer, Myclette Theodule, Rebecca Davidson and Margery Gann.

Meeting 2:

The MPC met for their second meeting on **May 15, 2018** at The Jean Mayer Human Nutrition Research Center on Aging (HNRCA). The meeting featured speakers whose research relates to malnutrition prevention and has potential for translation into practice.

Helen Rasmussen, PhD, RD, FADA, FAND, LDN welcomed the MPC to the HNRCA and introduced two guest speakers: Roger A. Fielding, PhD, Senior Scientist and Director, Nutrition, Exercise Physiology, and Sarcopenia Laboratory USDA-HNRCA and Jeffrey B. Blumberg, PhD, FASN, FACN, CNS-S Professor of Nutrition, Friedman School of Nutrition Science and Policy, Tufts University.

Dr. Fielding presented on the topic of Sarcopenia: Diagnosis and Treatment. He emphasized the importance of screening for muscle loss (sarcopenia) in older adults. Sarcopenia is a part of aging that can result in disability and poor health outcomes. Dr. Fielding discussed critical preventative care measures to combat malnutrition including:

- Adequate protein intake at the minimum of the RDA or higher
- Physical activity and resistance training, which can be done in a community setting without additional equipment
- Synergistic effect of diet and exercise combined
- Possible effects of Vitamin D, polyunsaturated and omega-3 oils

Dr. Blumberg presented on “Hidden Hunger in Older Americans.” He briefly spoke about prevention of hunger, stating that the focus is mostly around food insecurity, food access, oral health, protein/energy intake and chronic diseases. He addressed how health professionals often fail to recognize that the older population has an overall lower consumption of food. As a result, obtaining all micronutrients from food can be difficult. He quoted William James “A chain is no stronger than its weakest link, and life is after all a chain” to remind today’s health professionals of the “hidden hunger” issue. The key points that Dr.

Blumberg presented were:

- The effects of chronic lack of micronutrients are a profound, long-term issue that can result in increased morbidity and mortality.
- Micronutrient status is affected by diet, changes in aging, chronic disease, dementia/depression, polypharmacy, low socio-economic status and nutrition knowledge and decreased absorption and consumption.
- Fortified foods and supplements can counteract the marginal or below RDA intake of micronutrients in Americans.

The independent working groups then reported their progress:

1. The Data Collection and Management group report, was presented by Mary Giannetti:
Mary reported the group discussed the need to gather baseline information from various settings across the state on any existing malnutrition screening efforts. The members developed a spreadsheet and map identifying 280 targeted sites for a survey distribution in 9 different settings including hospitals (community and rural), community health centers, urgent care centers, VNAs, skilled nursing facilities, assisted living facilities and rehab centers. The group created a 6-item survey (administered through Survey Monkey) asking if screening is conducted, who performs it, what tool is used, and if any follow-up is done when malnutrition is identified.
2. Work group members agreed on a timeline to complete the survey distribution and collection within the next three months in hopes to begin the data analysis in September.
 - Kris Mogensen from Brigham and Women’s Hospital mentioned that the hospitals collect malnutrition information because of Joint Commission requirements. She suggested that the committee might want to request this information to have baseline malnutrition prevalence data in Massachusetts.
 - Helen Rasmussen from HNRCA submitted a written concern “Are there any funds allocated for the survey? Do we need IRB approval?” It was decided that an IRB would not be needed, as there is no personal data involved and therefore no HIPPA violations. There are no funds allocated to the Commission.
3. The Public Awareness group report, was presented by Diana M. Hoek:
Diana reported that they discussed how the attendee’s programs currently reach consumers. They emphasized the need to research evidence-based strategies.
 - A Tufts nutrition intern will work with Diana during the summer to identify the targeted audience (e.g., health care provider, consumer, caregiver, and homemaker).
 - Suggestions were made to interview the hospital discharge planner, ASAP or SCO care planners on how they connect the information to seniors.
 - It was noted that the Massachusetts Association of Councils on Aging might address malnutrition as one of their key issues in order to reach a large number of seniors in the community.
 - A phone application was discussed as a possible method of reaching the consumer to identify or manage malnutrition risks.
 - MPC members were asked to brainstorm a creative and meaningful phrase(s) to potentially be used for awareness materials. A focus group may be conducted to test different possible messages.
 - Workgroup members agreed on a timeline to complete a majority of the interviews and focus groups during the next three months.

To conclude the meeting, all members of the Committee discussed the next steps moving forward:

- Additional help may be needed to assist with data collection for the Data Group survey with completion by the end of summer.
- MPC members were reminded that the work is to benefit all of the elders in the Commonwealth of Massachusetts and challenged to think beyond the clients in their own programs.

- MPC should follow the model of USDA on large scale campaigns to reach the population.

Meeting 3:

The MPC met for their third meeting on **September 27, 2018** at the Charles River Room at One Ashburton Place. The highlight of the meeting was to focus on and collaborate with current efforts in the community related to malnutrition prevention.

Jean Terranova, Director of Food and Health Policy at Community Servings presented on a statewide project plan “Food is Medicine” (FIM) collaboration with Harvard Law School.

The state plan objectives and timelines were outlined:

- Use publicly available data to assess need
- Use surveys and listening sessions to assess access
- Develop a strategy to increase availability of FIM to meet the current need of the state.

Ms. Terranova presented the needs assessment, survey responses from health care providers, community based resources and health insurers, the recurring themes of the listening sessions and the distribution of need with food insecurity, vehicle access, and disease burden.

Member discussion focused on:

- Community needs include improving/controlling chronic conditions, weight loss, assistance for the elderly and disabled, food security
- Need for a standardized screening and centralized referral system for food-insecure or malnourished patients
- Acknowledgement of physicians lack of time with patients to adequately screen, discuss, refer, and treat food insecurity and other social determinants of health within the demands of the healthcare system
- Priority areas in Massachusetts were identified as Pittsfield, North Adams, Springfield/Holyoke region, Worcester, Fitchburg, Lowell/Lawrence, Boston, Chelsea, Revere, Lynn, Brockton and Fall River.
- Mapping is a useful technique that can be applied to other resources for elders such as therapeutic meals provided by the MA Elderly Nutrition Programs.
- The newly released ASPEN paper “Hospital Nutrition Assessment Practice 2016 Survey.” Kris Mogensen stated that the paper indicated that nutrition assessment and nutrition focused physical exam is happening in the hospital setting in the adult population using the Academy/ASPEN malnutrition characteristics. It is unclear if the data is retrievable and in a comparable format. Information about clinical characteristics is still lacking for those in a community setting.
- Co-chair, Carole Malone, discussed the importance of promoting malnutrition awareness in the many districts across the state that have large, well-attended senior events.
- Discussion about the need for information about the impact of socioeconomic factors and other unique factors (i.e. mobility factors) that affect elders and their nutrition status.
- Identification of MPC members continuing/departing and new members to enhance the work of MPC for the second year membership.

Work Group Final Reports:

A. Data Collection and Management Work Group

The group sought to identify strategies for improving data collection and analysis to identify, treat, and prevent malnutrition across the continuum of care.

i) Data Collection Workgroup Literature Review

The current literature suggests that malnutrition in older adults is a major contributor to morbidity and mortality^{2, 3, 4}. Undiagnosed malnutrition is further associated with readmission, longer hospital stays and higher costs for hospitals^(5, 6, 7,8,9). Research displayed that the 2-item Malnutrition Screening Tool (MST) is easy to administer and is validated in a variety of settings including acute care and community^(10,11). Although screening and diagnosis of malnutrition in older adults in a hospital setting has increased, it still remains low with poor percentage of malnutrition screening overall⁽¹²⁾. Systematic screening may increase dietitian referrals, food assistance and access to community-based services. Utilizing validated and heterogeneous tools that allow for aggregate data collection across the health system continuum is a prevalent concern.^(13,14).

ii) Statewide Survey

The group determined that there was a need to gather baseline information from various settings across the state on any existing malnutrition screening efforts. The members developed a spreadsheet and map identifying 280 targeted sites for a survey distribution in 9 different settings including hospitals (community and rural), community health centers, urgent care centers, VNA's, skilled nursing facilities, assisted living facilities and rehab centers. The group created a 6-item survey (administered through Survey Monkey) asking if screening is conducted, who performs it, what tool is used and if any follow-up is done when malnutrition is identified.

iii) Survey results:

- Various institutions responded to the survey with the highest respondents being Assisted Living Facilities (59%), ASAP/homecare (12%), and SNF/rehab (9%).
- The majority of respondents are unaware if they are using a screening tool (>60%), use one not listed, or don't use one at all.
- Most respondents identified they do ask two questions regarding weight loss and appetite, though not as a part of the scored Malnutrition Screening Tool (MST).
- Both the registered dietitian nutritionist (RDN) (61%) and nurse (48%) are involved in asking the MST related questions signifying the importance to include nurses in this process and future recommendations.
- Most respondents indicated there is follow-up when malnutrition is identified, but the details of the follow-up aren't clear, can be inconsistent, and may not be adequate.

B. Public Awareness Work Group

- i) The purpose of raising public awareness is to educate older adults about nutrition, risk factors, and eligible resources; increase caregiver and family knowledge about screening, nutrition resources and food assistance programs; and improvement of health professionals' knowledge and attitudes towards their responsibility for connecting patients to nutrition resources.

To determine some of the methods that seniors receive information, preliminary targeted interviews were conducted by Samantha Gillies, DPH intern, with 10 aging services stakeholders including local Councils on Aging, Food Banks, MA AARP, and the National Association of Nutrition and Aging Service Programs.

These interviews found that the primary audience is caregivers and family, while the secondary audience is healthcare providers. The message for the audience regarding malnutrition in older adults is to make it a person-centered approach, make connections at major life changes, and identify the need for screening and risk factors. Barriers are transportation, prejudice/stigma, education on eligibility, language and nutrition education. Methods of delivery must be from a trusted source such as ASAP/COAs, direct mail and social media. Communication tools to utilize are word of mouth and printed materials that can be easily copied such as flyers and placemats in large font and bright colors.

In addition to these discussions with aging services professionals, the group decided that it was also important to investigate the thoughts, opinions, and knowledge related to information sources and malnutrition directly from seniors themselves. Focus group locations were strategically selected to target seniors from diverse ethnicities as well as geographic settings throughout the state.

ii) Focus Group Results:

Malnutrition focus groups of 5-10 seniors were conducted by Elder Services of Berkshire County (rural), Chinese Golden Age Center in Boston (ethnic) Greater Springfield Senior Services (urban/city) and North Attleboro Senior Center (suburban) to explore participants understanding of malnutrition in the elderly. The focus groups investigated elders' responses to caregivers' responsibilities to protect against malnutrition, perception of credible information sources and preferred methods to receive information. Findings from the focus groups included:

- Participants were knowledgeable about malnutrition and its related causes. They cited indicators such as insufficient calories and/or nutrients, failing to eat healthful food, being very thin and having a poor appetite. Elders related causes of malnutrition to income, mental status, loss of family support, social isolation and access to healthful food, transportation, diet restrictions due to chronic illnesses and loss of taste.
- Many seniors identified barriers to receiving malnutrition prevention or treatment services including embarrassment, burden to family members, lack of motivation and inability to connect with community resources.
- Participating seniors stated that they trusted information from support groups, doctors, nutritionists, VNA, family, friends, nutrition information from their aging service providers and newspapers.
- Focus group participants stated that they preferred to receive information through flyers, newspapers, monthly newsletters and any other form of printed materials. Other suggestions included playing recordings at congregate meal sites, offering more nutrition education sessions, and providing nutrition information through the local cable channel and faith-based or local community sites. Participants expressed interest in attending events for seniors where they could access information.

The MPC met on December 10th, 2018 for their final meeting to review the final report.

COMING YEAR ACTIVITIES

- MPC will conduct various activities during the "Older Adult Malnutrition Awareness" week.
- MPC members will encourage healthcare stakeholders to conduct Awareness Campaigns at state legislative gatherings and community events.

- MPC will encourage member agencies to publish and promote evidence-based malnutrition resources designed for older adults, caregivers, providers and professionals via websites, social media and printed materials such as newsletters.
- MPC will distribute and present their report to key stakeholders including: Council on Aging, ASAPS/Nutrition Programs, Health Policy Commission, Massachusetts Academy of Nutrition and Dietetics, and Mass Hospital Association.

Suggested next steps for member agencies include the following:

MA Executive Office of Elder Affairs (EOEA):

- EOEA will work with the Governor’s office to designate a week in May of 2019 for “Older Adult Malnutrition Awareness Week”.
- EOEA will further promote and participate in formal events such as the national Malnutrition Awareness Campaign. Materials regarding malnutrition in older adults will be distributed to the entire senior network of consumers and providers.
- EOEA’s website will publish and promote evidence-based malnutrition resources to enhance the likelihood information will reach seniors, healthcare providers and caregivers.
- EOEA will gather data around malnutrition prevention and treatment. The goal to increase Medical Nutrition Therapy (MNT) outreach will be met by requiring administration of the Malnutrition Screening Tool (MST) at ASAP/nutrition intake assessment. It will be a requirement to offer MNT for those found at-risk of or with a malnutrition diagnosis.
- EOEA will encourage that the aging network in MA collaborate with hospitals in their service area to communicate malnutrition risk at discharge and refer to nutrition counseling and home delivered meals.

Massachusetts Department of Public Health (DPH)

- DPH will help to coordinate “Older Adult Malnutrition Awareness Week” and participate in corresponding events.
- DPH will assist the MPC on both data collection and public awareness campaigns.
- DPH will work with the MPC to raise awareness about malnutrition in older adults throughout its bureaus, divisions and programs.
- DPH will disseminate the commission’s studies and findings to appropriate DPH programs to reduce barriers and health care costs as well as improve quality indicators and outcomes.

Massachusetts Department of Transition Assistance (DTA):

- DTA is committed to providing low-income individuals food assistance and a path to economic long-term self- sufficiency.
- DTA will continue to partner with EOEA and a working group of advocates to focus on initiatives to help elders access and maximize SNAP benefits.
- DTA and MCOA’s ongoing collaboration has resulted in 20 new Councils on Aging becoming contracted Outreach Partners through a federal reimbursement project.
- DTA’s Senior Assistance Office is a specialized unit which designed to meet the specific needs of the Commonwealth’s elder population. Included in this office is a dedicated phone line for elders that will directly connect them with a live case manager.
- DTA has recognized that SNAP benefits can help prevent malnutrition in older adults and therefore will commit to promote and attend the “Older Adult Malnutrition Awareness Week” events.

- DTA will include malnutrition information along with its Nutrition Education program (SNAP-Ed) on its website which highlights programming for elders.
- DTA will continue working on SNAP senior medical deduction and Elderly Simplified Application Project (ESAP)

Massachusetts Department of Agriculture (MDAR):

- MDAR has identified opportunities to incorporate the Commission’s recommendations into existing programs and initiatives. MDAR will continue to collaborate with partner organizations to evaluate how to effectively integrate the recommendations into its programs.
- MDAR has committed to incorporating evidence-based malnutrition awareness information into The Senior Farmers’ Market Nutrition Program (SFMNP), nutrition education magazine. The program will also work with participating market managers to increase awareness of malnutrition and provide information on the resources needed to reduce it.
- MDAR will continue to collaborate with the Massachusetts Department of Transitional Assistance on the Healthy Incentives Program (HIP). The program provides a monthly reimbursement for SNAP recipients to purchase fruits and vegetables. Approximately 50% of the families who have earned HIP reimbursements have included seniors.

Aging Services Access Points Agencies (ASAPs) /OAA nutrition programs:

- ASAP/OAA nutrition programs will promote “Older Adult Malnutrition Awareness Week” and participate in corresponding events.
- ASAP/OAA nutrition programs will support dissemination of materials regarding malnutrition in older adults provided by EOEa.
- ASAP/OAA Nutrition programs will develop and institute internal processes to implement EOEa-mandated MST screening and follow-up.
- ASAP/OAA nutrition programs will establish protocols to address needs of individuals identified as experiencing or being at-risk for malnutrition.
- ASAP/OAA nutrition programs will encourage outreach to local healthcare providers to raise awareness of malnutrition risk and MST screening and availability of ASAP nutrition services to address malnutrition.
- ASAP case managers and intake workers will receive basic training in identifying overt physical manifestations of malnutrition.
- Home Care consumers who are certified as nursing-facility eligible (ECOP and waiver) will be offered an annual nutrition consultation.

Mass Association of Councils on Aging (MCOA)

- MCOA will make malnutrition one of their “key issues” in 2019 in order to reach a large number of seniors in the community.
- MCOA will attend “Older Adult Malnutrition Awareness Week” and participate in corresponding events.
- MCOA will publish evidence-based malnutrition prevention research on their internal website.
- MCOA will provide educational opportunities for Council on Aging and Senior Center staff to enhance their ability to provide malnutrition prevention information and effective programs to Massachusetts older adults.
- MCOA will include Malnutrition Prevention in their yearly conference that provides training on topics relevant to Councils on Aging, Senior Centers and other providers working with older adults.

Massachusetts Academy of Dietitians and Nutritionists (MAND):

- MAND will contribute to the work of MPC by reaching its members throughout the Commonwealth. The malnutrition week and its events will be promoted via the monthly blog and member list. The blog will be the primary channel to raise awareness among and call to action RD/LDNs. The aim is to implement nutrition prevention policies and strategies within their agencies.
- MAND members will receive the Malnutrition Prevention Commission's meeting dates and notes.
- MAND members will be offered a list of malnutrition resources and website links via blog and at the Annual Nutrition Convention & Exposition (ANCE).
- MAND will highlight and/or distribute a list of evidence-based malnutrition research.
- MAND members, working at appropriate agencies, will be encouraged to use MST screening questions in an effort to prevent and treat malnutrition.

Jean Mayer USDA Human Nutrition Research Center on Aging (HNRCA) /Tufts University (Academic/Research organization)

- HNRCA will attend "Older Adult Malnutrition Awareness Week" and participate in corresponding events.
- HNRCA will work with other academic research organizations and MPC to make dietary policy recommendations, and offer trainings and education which will improve the nutrition status of older adults. These topics from their study results include immune function, vitamin and mineral absorption, physical capacity as well osteoporosis, cardiovascular disease, diabetes, cataracts and macular degeneration.
- HNRCA/ Tufts University will publish evidence based malnutrition research as it comes available.
- HNRCA will also assist community organizations to conduct MNT outreach to treat malnutrition.

Brigham and Woman Hospital (BWH):

Malnutrition has a negative impact in the acute care setting. BWH is one of the hospitals participating in Malnutrition Quality Improvement Initiative, in accordance with the Academy of Nutrition and Dietetics. A number of studies conducted at BWH have demonstrated how this problem directly affects members of the Commonwealth.

- Use BWH Malnutrition QI initiative as a best practice and encourage other hospitals to participate.
- Request data collection on malnutrition screening from hospitals as a baseline and also analyze to see if there are any disparities among certain groups, location where efforts should be focused. Continued collection of prevalence data can show change over time.

Background: Malnutrition, Length of hospital stay and 30 days Readmission

- In a study¹⁵ of approximately 6500 critically ill patients admitted to BWH intensive care units found that malnutrition was a significant predictor for 30-day mortality and that obese critically ill patients with malnutrition had increased odds of mortality compared to obese patients without malnutrition¹⁶. Malnourished patients who survive critical illness, those who are malnourished have much higher odds of readmission within 30 days of discharge as well as for 90-day mortality¹⁷. In a study of 1361 patient who required emergency general surgery and received a nutrition assessment at BWH, those with mild, moderate, or severe malnutrition (including marasmus) had over a 300% increase in the odds of 90-day mortality¹⁸.

- Other studies have been conducted using the malnutrition clinical characteristics that were published by White et al ¹⁹(5) in 2012 and have found similar results to work done at BWH. Hiller et al ²⁰ found that malnourished patients had over a 300% increase in the odds of readmission within 30 days of discharge and over a 500% increase in the odds of death within 90 days of discharge compared to the well-nourished patients. Hudson et al ²¹ found that moderate or severely malnourished patients had longer hospital length of stay, higher likelihood of being readmitted within 30 days of discharge, and higher odds of hospital mortality.

BWH efforts to defeat Malnutrition

- BWH has been using the Malnutrition Screening Tool (MST) with the implementation of the Epic electronic health record starting in May of 2015. Currently, BWH committed to make this process easier to assure patients are referred to the dietitian in a timely manner for full nutrition assessment and care plan development.
- BWH will work closely with the clinical documentation specialists to assure that patients who are diagnosed with malnutrition are coded appropriately to allow for capture of the true prevalence of malnutrition in national surveys.
- BWH will work with the American Society for Parenteral and Enteral Nutrition (ASPEN) and Academy of Nutrition and Dietetics (AND) to encourage other hospitals to adopt the same practice.

Hebrew Senior Life (HSL), a Harvard Medical School affiliate (Long Term Chronic Care Hospital/rehabilitation facility):

- The nursing staff at HSL will use the MST to identify malnourished patients. MST will automatically be triggered on the nurses' intervention set on the electronic medical record.
- MST will be required upon admission for all patients in Rehabilitative Services Unit (RSU), Medical Care Acute Unit (MCAU) and Long Term Chronic Hospital (LTCCH). Since patients in RSU and the MCAU are frequently seen by a registered dietitian, MST will not be performed after admission unless significant change occurs. For patients in LTCCH, MST will be performed monthly and will be set as an automatic order on patient's intervention.
- An automatic nutrition consult will be generated for patients who receive a score of 2 or greater. The RD will conduct an in-depth nutrition assessment, including nutrition focused physical exam, and provide individualized Medical Nutrition Therapy.
- The provider will be notified if the patient meets criteria for severe malnutrition.
- The Academy of Nutrition and Dietetics Nutrition Care Manual will be accessible to all staff through electronic medical records in order to provide optimal nutrition care.

Massachusetts Health Policy Commission:

- Suggest funding a pilot program to study the impact of improved malnutrition screening, assessment, and intervention in older populations on reducing emergency department (ED) visits and hospital readmissions.

CLOSING

EOEA is grateful to the Legislature for its continued interest in the impact of malnutrition prevention research and education, and for creating the Commission on Malnutrition Prevention Among Older Adults to allow us to study methods to prevent and reduce malnutrition in the Commonwealth. With continued growth in the elder population, and the high cost of health care, MPC will continue to serve

an important function by working with the EOEA Secretary to help prevent malnutrition among elders and further helping to reduce rising health care costs.



Malnutrition Screening Tool (MST)

STEP 1: Screen with the MST

1 Have you recently lost weight without trying?

No	0
Unsure	2

If yes, how much weight have you lost?

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

Weight loss score:

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

No	0
Yes	1

Appetite score:

Add weight loss and appetite scores

MST SCORE:

STEP 2: Score to determine risk

**MST = 0 OR 1
NOT AT RISK**

Eating well with little or no weight loss

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

**MST = 2 OR MORE
AT RISK**

Eating poorly and/or recent weight loss

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

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

Notes: _____

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