Addressing Malnutrition in Community Living Older Adults

A Toolkit for Area Agencies on Aging

MARYLAND
Department of Aging

Larry Hogan, Governor    Boyd K. Rutherford, Lt. Governor    Rona Kramer, Secretary

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Acknowledgements

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- Carroll County Bureau of Aging and Disabilities
- Maintaining Active Citizens (MAC, Inc.) and it's Maryland Living Well Center of Excellence
- Washington County Commission on Aging

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- Bethesda NEWtrition & Wellness Solutions - participated in the creation of this document as well as contributed to and edited the content.
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About this Project

In 2017, The Maryland Department of Aging was selected as one of six national “Innovations in Nutrition Services and Programs” grant awardees providing pioneering approaches for addressing the nutritional health of older adults. The Administration for Community Living (ACL), issued this first-ever “innovations” grant opportunity to drive improved health outcomes for senior meal program recipients by promoting higher service quality and increased program efficiency through innovative nutrition service delivery models. Our Department acknowledges and appreciates ACL’s leadership in funding unique initiatives, such as this grant project.

The two year grant also supports: 1) creating novel post-discharge, shelf-stable meal packages that meet individual’s needs based on their health condition(s), 2) testing the effectiveness of a model malnutrition awareness workshop for seniors at risk for falls (Stepping Up Your Nutrition), 3) establishing cross-referral links between the state’s healthcare system and the aging network, and 4) creating a mobile phone “app” to help determine the best approaches to address nutritional risk in community settings. Grant partners include the Maryland Department of Health, Maintaining Active Citizens’ (MAC, Inc.) Maryland Living Well Center of Excellence, Bethesda NEWtrition and Wellness Solutions, and the University of Maryland’s School of Nutrition Science.

The Maryland Department of Aging and our grant partners recognize that Area Agencies on Aging (AAAs) have a unique opportunity to address an emerging issue driving healthcare costs: older adult malnutrition. This toolkit’s goal is to develop a nationally-relevant template for aging network providers to screen and address social determinants of health (SDOH), as well as communicate effectively with healthcare partners regarding malnutrition risk and older adults. Along with the pioneering work of national and other states’ leaders who have begun turning their attention to malnutrition across the hospital, post-acute and community settings, we hope this toolkit will act as an additional and important “piece of the puzzle” to facilitate active engagement by local aging network organizations.
Executive Summary

Why Is Malnutrition Important?
- The aging network’s mission to “Maximize the independence, well-being, and health of older adults” aligns with the importance of addressing malnutrition.
- Aging network staff often know their clients well, develop person-centered approaches, and are best-suited to identify malnutrition risk.
- Malnutrition or “poor nutrition” is more common than we realize and causes significant risk for illness, falls and poor quality of life. It often goes undetected, but there are signs that can be identified in the community, which can prevent these deleterious outcomes.
- The aging network is able to impact malnutrition through providing services that address social determinants of health, which contribute to malnutrition risk.
- Hospitals are unable to manage the complex needs of malnourished patients, but community-based organizations (CBOs) have years of experience providing services that support nutritional well-being.
- CBOs are important partners for healthcare, to smooth malnourished patients’ transitions of care and prevent malnutrition in community-residing older adults.

Establish a Vision and Path to Success
- Clarify why your CBO is devoting resources to addressing malnutrition and establish a vision statement.
- Acknowledge that your organization provides services that address the social determinants of health and YOUR STAFF ARE THE EXPERTS in this arena.
- Consider how to most effectively utilize existing staff and programs; create partnerships; learn about new programs and services.

Process Flow Planning
Follow the “community-based malnutrition care pathway”:
- Step 1: Implement validated screening tools and integrate into assessments.
- Step 2: Address root cause(s). Based on the screenings, conduct eligibility counseling and provide appropriate and documented referrals. A sample referral table is provided.
- Step 3: Monitor client progress and quality of services. A sample community care plan is provided and follow up is optimally provided at regular intervals. Implement quality assurance tools; upgrades to IT system may be required.
Define Roles & Responsibilities

- Malnutrition is not solved through the provision of food alone. In order to effectively address malnutrition, an interdisciplinary approach with cross-referrals to various services is required.

Engage Partners

- Partner with insurance companies, consider regional alliances, or contract directly with hospitals, Care Transition Organizations, and primary care providers.
- Review examples of successful healthcare-community partnerships including MAC, Inc. and the Southern Maine Agency on Aging.
- ICD-10 social determinants of health codes can be used for billing reimbursement with healthcare. Case studies are shared.
- Sample healthcare presentation and discussion tips are provided.
How to Use this Toolkit

This toolkit is designed to help set up internal processes that prepare AAAs to address older adults with malnutrition, or other health conditions. Although it suggests healthcare partnerships as the end goal and includes recommendations for setting up successful linkages, it is not intended to be a detailed guide on how to construct a partnership with a healthcare organization.

1. To educate yourself and your staff on what malnutrition is, what it looks like, how common it is among older adults, and how you can improve the quality of life of your clients through providing resources that address the many risk factors.

2. To help you think about why your agency may want to address malnutrition and establish an organizational vision. This process begins by identifying what your agency is already doing and then considering what additional steps you could take.

3. To understand the process components required to effectively address community-based malnutrition and utilize templates provided to create and implement a plan for your agency.

4. To acknowledge that it takes a team effort to address malnutrition and work across disciplines within an organization to establish defined roles for various staff members.

5. To understand healthcare partnership models and billing reimbursement strategies and to prepare for conversations with potential partners, both in the healthcare arena and elsewhere.
Why Is Malnutrition Important?

Community-Based Aging Network Mission

The national network of organizations serving older adults in the community, often called the “aging network,” consists of State Departments of Aging, Area Agencies on Aging (AAAs) and Local Providers such as Aging and Disability Resource Centers (ADRCs or Maryland Access Points, aka MAP), home delivered meals organizations and so on. Since 1972, when the Older American’s Act was created, this interconnected system of support programs and services has provided millions of meals, health insurance counseling sessions, physical activity programs, and much more to hundreds of thousands of people annually.

The Administration for Community Living (ACL) was created in 2012 by the U.S. Department of Health and Human Services to serve as the Federal agency responsible for improving the lives of older adults and people with disabilities through services, research and education. The ACL mission statement reads “Maximize the independence, well-being, and health of older adults, people with disabilities across the lifespan, and their families and caregivers.” As will be outlined throughout this toolkit, addressing malnutrition aligns with the mission of the aging network.

While some interactions with older adults, their families and caregivers are brief (eg, a call asking for a referral), many staff who work in the aging network feel a deep commitment to assisting participants and may know an older adult for months or years, seeing them daily or weekly (eg, at meal sites, home delivered meals, senior center gyms, etc.). These dedicated staff often describe having “a servant’s heart” and when asked will share why malnutrition, among other conditions, are important to address:

“Our seniors count on us, we have to be there for them.”

“People spend such a short time in the hospital and in the doctor’s office, so it’s really important for community staff to send positive health messages.”

"Without adequate nutrition not only do our bodies lack necessary nutrients, but our will to engage socially and for ourselves becomes impacted." - COO, AAA.

"Nutrition is a pathway to health and longevity which when addressed appropriately can reduce future economic burden of healthcare costs and prolong the need for other home and community based programs." -CEO, AAA.
Everyday Examples of How Staff Identify Malnutrition

AAA staff members are well poised to identify signs of malnutrition because they are the “eyes and ears” in the community. Nutrition staff especially get to know a lot about their participants and can be important resources to make timely referrals when there is a significant change in behavior, medical condition or living situation.

“My drivers know exactly what to look for to identify warning signs. If the house isn’t being kept up, if a client seems more confused than usual, that can mean a change in their support system or medical status.” - Home-Delivered Meals Coordinator.

“I could tell from across the parking lot when I saw John that he was not taking his medications and was not doing well. I contacted our MAP office to ask them to engage with John and his medical provider to see what we could do to help.” - Senior Center/Congregate Meals Supervisor.

Malnutrition: What is it?

“You Are What You Eat” is a phrase we have all heard, and it is essentially true. The food we eat and drink makes up our heart, lungs, hormones, bones and brain. Our bodies are made up of the nutrients we get from our food (protein, calcium, water, etc.).

We can eat all the right foods, but if our hormones - insulin for example - or organs aren’t working properly, the good nutrients we eat won’t be used to improve our health.

In fact, if nutrients don’t go where they belong, they can cause problems, often seen as chronic diseases including heart disease and diabetes.

Malnutrition or “poor nutrition” is defined as “the inadequate intake of nutrients, particularly protein, over time and may contribute to chronic illness and acute disease or illness and infection.”¹ It is a hidden condition in the body that affects - and is affected by - medical conditions as well as social determinants of health. Because malnutrition is an imbalance in the body related to nutrients, a person may be fat, thin or average build and still be at risk for this condition. In fact, you can’t tell if a person has malnutrition just by looking at them.
When a dietitian or physician diagnoses malnutrition, they look for a person to have at least two of the following conditions: inadequate food intake, weight loss over time, loss of muscle, reduced amount of body fat, fluid retention (edema, swelling), or reduced hand grip strength.  

<table>
<thead>
<tr>
<th>TRY THIS: What signs of malnutrition can you identify?</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://www.pcci.eu/browse/evidence-in-practice/item/5095-increasing-incidence-of-cachexia-following-stroke.html" alt="Image 3" /></td>
</tr>
</tbody>
</table>

1. [https://www.caregivers.com/blog/2012/10/senior-nutrition-poll/](https://www.caregivers.com/blog/2012/10/senior-nutrition-poll/)

**ANSWER:** You can’t tell for sure without a physical examination but there are clues, including:

1. Hollow eye sockets, sunken temples, cheeks
2. Prominence of collarbone/clavicles
3. Muscle loss in hands
4. Fat loss in upper arm
Older adults are especially at risk for malnutrition because they may already have a weakened immune system, have several risk factors, and often have one or more chronic conditions. Many issues can lead to malnutrition, including health-related and social/economic factors including the ones listed below.  

**TRY THIS: Think of the clients you have seen during the past week. Did any of them have these malnutrition risk factors? (check all that apply)**

<table>
<thead>
<tr>
<th>Poor appetite</th>
<th>Dementia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor dental health</td>
<td>Depression</td>
</tr>
<tr>
<td>Trouble chewing or swallowing</td>
<td>Social isolation</td>
</tr>
<tr>
<td>Changing taste buds</td>
<td>Limited income</td>
</tr>
<tr>
<td>Chronic diseases</td>
<td>Food insecurity</td>
</tr>
<tr>
<td>Medication side effects</td>
<td></td>
</tr>
</tbody>
</table>

It’s likely that you checked several items in the list above. That means you regularly see older adults at risk for malnutrition.

**What does that mean?** YOU and your staff have the ability to identify malnutrition risk and address the causes through helping with your program and referring to other services offered in the community.

Malnutrition has a number of consequences, including increased risk for infection, delayed wound healing, higher rates of falls and fractures, loss of independence, and frailty, resulting in longer hospital stays, higher readmission rates, five times higher rates of illness and death, and 300% higher healthcare costs.

In Maryland, the estimated annual cost of malnutrition is $340,440,992, or approximately $55 per person. See Appendix 1 for a list of websites you can visit for more information about malnutrition.

Social Determinants of Health (SDOH)

As outlined above, social determinants of health play a large role in the risk for malnutrition. Studies show that 40-90% of poor health can be traced back to social, behavioral and economic factors. ⁹

"Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be." ¹⁰

By addressing the SDOH, which contribute to malnutrition, you can help to reverse this condition. The table below outlines some potential scenarios and how they relate to malnutrition and SDOH.

Source: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
Table 1: Social Determinants of Health and Malnutrition.

<table>
<thead>
<tr>
<th>Social Determinant</th>
<th>Malnutrition Sample Scenarios (causes and effects of malnutrition are IN BOLD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food and Nutrition</strong></td>
<td>Food and Nutrition Client has always followed a low fat diet, but her new diagnosis of cancer means she needs to put aside her usual dietary restrictions to avoid losing weight and strength needed for her cancer treatments. Unfortunately, she is unable to “let go” of years of dietary restrictions so does not eat enough to maintain her strength. She experiences weight loss, frailty and significant decline in ADLs.</td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td>Shared housing with his daughter’s family means he only eats a hot meal when the family sits down together for a meal, which is only once or twice a week. He makes do with sandwiches and canned soup. This high salt diet makes his CHF worsen leading to frequent hospitalizations and ER visits.</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td>A client has heard of the falls prevention and exercise classes and meals at the senior center but does not have access to transportation to attend. Without these low- or no-cost programs, s/he is unable to participate in exercise, learn about how to prevent falls or receive a meal that often provides up to two-thirds of most participant’s daily calories.</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>The cost of nutritious foods to keep healthy are not affordable or accessible. Result is high blood pressure, obesity and heart disease despite medications and diet and medical counseling. These conditions increase inflammation and don’t allow the body to effectively store muscle in his/her organs and blood. Older adult becomes weak, lose independence and chronic conditions worsen.</td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td>A client may be unaware of subsidies that assist low income seniors. So, money that could be used for nutritious food or medications must go towards utilities and rent. Chronic conditions and nutrition decline.</td>
</tr>
<tr>
<td><strong>Personal Safety</strong></td>
<td>If a client is afraid to walk outside they may not get needed exercise for strength and to manage diabetes. Poor diabetes control results in the body being unable to store muscle even when s/he eats enough protein. High blood sugar leads to frequent hospital admissions, but client does not go to follow up visits due to safety concerns traveling to medical appointments.</td>
</tr>
<tr>
<td><strong>In-Home Care</strong></td>
<td>A client who has difficulty bathing and grooming does not wish to attend senior center activities. In-home assistance can improve confidence in social interactions and facilitate improved health and medication management.</td>
</tr>
<tr>
<td><strong>Social Support</strong></td>
<td>Client lives alone and is socially isolated. Meal time is brief and she often skips meals because sitting alone at the kitchen table is unappealing. Research shows that eating with others improves food intake. Congregate meals, volunteering and senior center activities provide this support and connection.</td>
</tr>
</tbody>
</table>
### Mental Health

Depression causes a decrease in appetite, resulting in weight loss, dehydration and poor nutrition. Client becomes isolated and weakness results in a fall.

### Health Care Referral

A client may be in need of dental care but there are no available referrals. Therefore, s/he eats soft foods and avoids protein items like meats. **Lack of protein results in weakness and social isolation.**

### Employment

Lack of profession or volunteer opportunities may lead to **social isolation and depression.** Depression can result in overeating and lack of exercise, worsening chronic conditions.

### Health Education

**Chronic Disease self-management workshops, and other evidence-based programs**, provide education and allows for clients to feel activated and in control of their health. These classes have proven positive impacts on healthcare costs and on individuals’ mental/physical health.

### Addressing Malnutrition in the Community: Sustainable, Person-Centered Impact

Research and healthcare awareness about the impact of malnutrition on health outcomes has focused mostly on improving malnutrition in the hospital setting, while acknowledging the critical importance of addressing individuals’ nutritional health prior to and after hospital admission.

Only recently has progress emerged on preventing, identifying, and managing malnutrition during transitions of care and in the community setting. Hospitals only have the capacity to provide short-term intervention and are not equipped to address the complex social needs that often accompany malnutrition. They already recognize the costly impact of malnutrition and appreciate the role of the community.

Healthcare organizations have monetary incentives and financial penalties which can motivate them to partner with community-based agencies, like AAAs, if they are aware of the services and programs AAAs offer including: 1) managing transitions of care from hospital to home, 2) offering social services and preventive health programming and 3) providing benefits counseling and eligibility screening. Social supports, including assistance with housing, nutrition and income, have been shown to improve health and reduce healthcare costs.

Effective implementation of high quality AAA services can therefore reduce healthcare costs. As outlined earlier, our programs and services interact with individuals at risk for malnutrition on a regular basis.
Why should AAAs consider partnering with healthcare? Organizations may gain access to additional resources such as:

- Improved health and quality of life for our clients and community,
- Expanded referral options to appropriately assist older adult,
- Additional funding stream(s),
- Increased cost-effectiveness of existing programs such as chronic disease self-management, meals programs, SHIP, MAP etc.,
- Opportunities to offer a wider number and types of services,
- Enhanced quality assurance of current and new programs,
- New staffing resources and increased professional training opportunities for staff,
- Improved technology and documentation of high quality service delivery to better justify funding.

Questions to Consider

1. Define malnutrition in your own words.
2. Describe a client who might be at risk for malnutrition, perhaps someone you’ve seen or spoken to this past week?
3. What are the benefits to your organization of taking on malnutrition? What are the barriers and how might you overcome them? Who can you partner with to be successful?
Establish a Vision and Path to Success

What is your Vision?

Look back at the Why is Malnutrition Important? section. Clarify why your organization is becoming involved in addressing malnutrition. Establish an organization-wide vision that drives each division’s roles. Some examples could include:

- To meet the unmet needs of our community and the older adults we serve.
- To improve staff collaboration to enhance efficiency and effectiveness of our staff and resources.
- To have an impact on healthcare costs while bringing in new revenue.

FILL IN: What is your agency’s vision for defeating malnutrition?

______________________________________________________________________

Aging Network “Owns” Social Determinants of Health!

AAAs already provide a wide variety of services for older adults that address SDOH and allow them to live healthfully and safely in their homes, including in-home care, case management, home-delivered meals, transportation, prevention of elder abuse and neglect and evidence-based programs. In fact, AAAs are the leading experts at providing social services that address social determinants of health. Tackling malnutrition is not a matter of making changes to these programs and services, but instead thinking about how to most effectively screen and refer to these programs.

Use Existing Staff and Programs Efficiently and Effectively

Screening is a process for determining if there may be a problem. Screening differs from assessment and diagnosis, which often requires a medical expert. There are validated tools for screen for various conditions, including malnutrition. Validated tools have been tested for:

1. reliability (the ability to produce consistent results),
2. validity (the ability to produce true results), and
3. sensitivity (the probability of correctly identifying a patient with the condition).

Executive Directors can establish uniform policies and procedures for staff within existing programs and services that can positively affect and even cure this and other conditions. As we pursue clinical-community partnerships, the goal for local aging organizations - where there often are no healthcare staff - will be to perform screenings for malnutrition and other conditions.
There are a number of validated malnutrition risk screening tools, including the Malnutrition Screening Tool (MST), which is a quick and easy tool containing just two questions.\textsuperscript{12}

Should a “positive” screen occur, AAAs need to establish a process to notify the persons’ healthcare provider in order to:

- Facilitate the healthcare provider’s ordering of further tests, referrals to specialists, physical therapy, etc.
- Communicate community-based interventions, which will both demonstrate our organization’s impact, potentially secure funding based on effectiveness and allow for effective clinical-community approaches to addressing the illness(es).

Truly, only by working hand-in-hand “across care settings” (eg, between hospital and community), will individuals have the best chance at improving their health and quality of life.

**Consider Offering Additional Programs and Services**

Stepping Up Your Nutrition (SUYN), one of the evidence-informed workshops offered by AAAs, is specifically focused on malnutrition related to falls risk. Participants identify their personal nutrition risk status and establish their own goals to improve nutritional status and muscle strength. **SUYN could be an appropriate referral for an individual with malnutrition or could help identify a root cause for an individual referred for falls.** See Appendix 2 for a list of evidence-based programs available across Maryland.

The phrase “food is medicine” is becoming increasingly popular among the news and media, as a number of organizations are starting to focus on this concept. The Food Is Medicine Coalition is an association of 20+ nationwide non-profit medically tailored food and nutrition providers that is leading much of the research and policy advocacy in this field. Massachusetts is also pioneering some of this work, with the launch of their Food Is Medicine State Plan in June 2019. In Maryland, the Department of Aging is piloting medically tailored, shelf-stable meal packages for older adults transitioning from hospital to home that are based on the “food is medicine” model. These packages are geared toward individuals with malnutrition, food security, and/or high risk for readmission and could serve as a bridge to integrate patients with other AAA service offerings, including home delivered meals, food assistance programs, etc.

Nutrition education and/or counseling can supplement these programs. In-home medical nutrition therapy (MNT) could be a service offering to consider. The Elder Services of the Merrimack Valley, Inc., a AAA in Massachusetts, has launched an in-home MNT program that has been popular with healthcare partners. In this program, clients with type 2 diabetes and chronic kidney disease are covered for up to three hours of counseling in year one and two hours in subsequent years by a Registered Dietitian, who is able to bill for reimbursement. You can learn more about MNT at the Academy of Nutrition and Dietetics website here.

Every AAA offers nutrition education, much of which will be helpful to prevent or address malnutrition. Consider options that focus on adequate protein, managing chronic conditions and looking for the warning signs of malnutrition. See Appendix 1 for client education materials.

Next, we’ll share how to appropriately incorporate screening tools and refer to existing and/or new programs and services that address malnutrition.

Questions to Consider

1. What is your organization’s vision to address malnutrition?
2. What services are you or your existing partners already providing that may address malnutrition risk among clients?
3. What additional services could you provide or connect clients with?
Process Flow Planning

Once you have created a vision for your agency and have established a set of referral service offerings, it is time to lay out the steps you will take to identify and address malnutrition among clients in your agency. This "community-based malnutrition care pathway" has been divided into three steps, which include:

Step 1: Implement validated screening tools

Step 2: Address root causes(s)

Step 3: Monitor client progress and quality of services

Each of these steps will be reviewed in greater detail in the following pages.

Figure 1: Overview of Community-Based Malnutrition Care Pathway - Steps and Tools Involved.

1. IMPLEMENT VALIDATED SCREENING TOOLS

   Intake clients that are self-referred from the community or referred by healthcare or outside organizations.

   Screen clients with validated malnutrition and social determinant of health tools. Tool: List of malnutrition and SDOH screening tools.

2. ADDRESS ROOT CAUSE(S)

   Refer clients to new and/or existing programs and services that can address the root cause(s) of malnutrition and implement interdisciplinary cross-referrals. Document screening results and service/program referrals. Tool: Sample Referral Table.

3. MONITOR CLIENT PROGRESS AND QUALITY OF SERVICES

   Document client goals, referrals, action steps, and progress notes.

   Follow up with clients at established intervals to re-screen for continued unmet needs and assure the quality of services provided.

   Report positive screens, ICD-10 codes, client status and outcomes to healthcare partners. Tool: Sample Community Care Plan.
Step 1: Implement Validated Screening Tools

Screening is the first step to identify what issues a client might need to address. Validated screening tools are processes that have been developed through extensive testing and will assure you that your result can be used with confidence. AAAs already utilize a number of screening tools on their clients, which may vary from state to state. AAAs in the state of Maryland are required by Medicaid to screen clients who have a need for long term services and supports with a Level 1 Screen, congregate/home delivered meal clients with the DETERMINE checklist, and home delivered meal clients with the Home Delivered Meals Priority Screening. See Appendix 3 for more details regarding Maryland screening tools.

In order to adequately address malnutrition, it is important for AAAs to screen for SDOH, which may exacerbate or contribute to malnutrition. A SDOH screening tool will allow for the identification of uncaptured social needs and for referrals to be made to appropriate services that address the root causes of malnutrition. One AAA in Maryland, MAC, Inc., screens select clients for malnutrition using the Malnutrition Screening Tool (MST) and for social determinants of health using an internally created tool. See Appendix 4 for a copy of this tool. These screening tools can be integrated into program or intake assessments, disease prevention programs, evidence based health promotion classes, etc. A more centralized approach can be employed or perhaps each department could screen for certain issues, such as social isolation, falls risk or depression.

The choice of malnutrition and SDOH screening tool(s) utilized by a AAA may vary depending on fiscal resources, staff time, training and preferences, coordination with existing AAA databases and healthcare electronic medical record (EMR) systems, the availability of programs to address screening components and other local issues. See Appendix 5 for a list of malnutrition and SDOH tools. There is no universal tools used across the healthcare system for SDOH. The Social Interventions Research & Evaluation Network (SIREN) has created a comparison table to assist with the selection of a SDOH screening tool. It contains the most widely used tools and describes the target population and social domains addressed by each tool. SIREN is also in the process of releasing a systematic review of screening tools to assist organizations with choosing an appropriate tool for their population.
Step 2: Address Root Cause(s)

To effectively address the root, or underlying, causes of malnutrition and allow an individual to improve their mental and physical health, person-centered screening, referrals to programs and services, as well as eligibility counseling should take place. With the implementation of new screening tools, needs that may have previously gone under the radar will be identified. This will allow for better service planning and more comprehensive care for the client.

Generally, the more SDOH that are addressed, the better overall result will be for the person. Although, often, a few, key changes can positively affect someone’s physical and mental health, which reinforces healthy actions. As outlined earlier, and below, there may be many SDOH which could be addressed to help correct malnutrition and improve health; however...

THE ONLY SOLUTIONS THAT WILL WORK ARE THOSE WHICH THE CLIENT WILL ACTUALLY DO.

The AAA staff should identify clients’ wants, needs, and preferences and discuss which services and programs fit these needs. Often, motivational interviewing skills will be helpful in working with individuals, in order to allow them to prioritize and select solutions. A successful approach is often based on starting with one or two ideas, and then over time additional programs or services to may be added to improve their health and independence.

Once priority areas are determined by the client, and at established follow-up intervals, the sample referral table below can be completed to document the screening results and recommended services and programs.

This form can be sent to the healthcare provider along with the Community Care Plan in the following section. Social determinants ICD-10 codes are embedded in the table, which will be explained in greater detail in the Engage Partners section. Note that this is only a sample as each AAA offers a different set of programs and services.
Table 2: Sample Referral Table - Social Determinants of Health with ICD-10 codes.

<table>
<thead>
<tr>
<th>Care Planning Components</th>
<th>AAA Referral Programs and Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food and Nutrition</strong> Z594</td>
<td></td>
</tr>
</tbody>
</table>
- Senior Center Congregate Meals  
- Home-Delivered Meals  
- Nutrition counseling, MNT, nutrition education, and care planning  
- Commodity Supplemental Food Program (CSFP)  
- Community food resources (Food Bank, etc.)  
- Senior Farmers Market Nutrition Program  
- Stepping Up Your Nutrition  
- Post-discharge, medically-tailored meals |
| **Housing** Z590 |  
- Assisted Living (including SALGHS)  
- Ramp Assistance  
- Home Modification  
- Assistive Technology  
- Durable Medical Equipment  
- Congregate Housing Services Program |
| **Transportation** Z650 |  
- County or Regional Transit  
- Cab/Bus Vouchers  
- Senior Village  
- Community for Life |
| **Financial** Z590 |  
Application assistance for financial aid:  
- SNAP  
- Medicaid  
- State Health Insurance Program (SHIP)  
- Energy-assistance programs  
- Income-tax assistance  
- Medicare Part A, B, C, D  
- Medicare Billing, Appeals, Denials, Grievances  
- Medicare Fraud Assistance  
- Oral nutritional supplements (Ensure, etc)  
- Prescription assistance  
- Assistance for dental, eye care, hearing aids |
| **Utilities** Z590 |  
- Low-Income Home Energy Assistance Program (LIHEAP)  
- Electric Universal Service Program (EUSP)  
- Universal Service Protection Program (USPP)  
- Utility Assistance (other) |
| **Personal Safety** Z600 |  
- Elder Abuse  
- Legal Assistance  
- Emergency Response Systems  
- Falls Prevention (Stepping On, Matter of Balance, Tai Chi for Better Balance) |
<table>
<thead>
<tr>
<th>In-Home Care Z602</th>
<th>Arthritis foundation classes (Walk with Ease)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Home Care Z602 (con’t)</td>
<td>Sitters and in-home care services (personal care, chore service)</td>
</tr>
<tr>
<td></td>
<td>Home Care agencies</td>
</tr>
<tr>
<td></td>
<td>Community First Choice</td>
</tr>
<tr>
<td></td>
<td>Senior Care</td>
</tr>
<tr>
<td></td>
<td>Home-delivered meals</td>
</tr>
<tr>
<td></td>
<td>Dietitian referral</td>
</tr>
<tr>
<td></td>
<td>Senior Village</td>
</tr>
<tr>
<td>Social Supports Z600 or Z630</td>
<td>Senior Center (exercise, socialization, Congregate Meals)</td>
</tr>
<tr>
<td></td>
<td>Telephone Reassurance</td>
</tr>
<tr>
<td></td>
<td>Support Groups: Caregivers, Renal, Stroke, ALS, Parkinson’s</td>
</tr>
<tr>
<td></td>
<td>Adult Day Care</td>
</tr>
<tr>
<td></td>
<td>Volunteer opportunities</td>
</tr>
<tr>
<td>Mental Health Z640 or Z650</td>
<td>PEARLS: Program to Encourage Active, Rewarding Lives</td>
</tr>
<tr>
<td></td>
<td>Enhance Wellness</td>
</tr>
<tr>
<td></td>
<td>Healthy IDEAS</td>
</tr>
<tr>
<td></td>
<td>Behavioral Health Referral (Core Service Agency or Health Department)</td>
</tr>
<tr>
<td>Health Care Referral ICD-10 code dependent on root cause</td>
<td>Primary Care Physician</td>
</tr>
<tr>
<td></td>
<td>Clinics: Dental, Eye, Physical Therapy</td>
</tr>
<tr>
<td></td>
<td>Community Health Worker</td>
</tr>
<tr>
<td></td>
<td>Adult Medical Day Care</td>
</tr>
<tr>
<td></td>
<td>Local health department</td>
</tr>
<tr>
<td></td>
<td>Home care agencies</td>
</tr>
<tr>
<td></td>
<td>Medical supplies</td>
</tr>
<tr>
<td>Employment Z560</td>
<td>Senior Employment</td>
</tr>
<tr>
<td></td>
<td>AAA volunteer coordinator</td>
</tr>
<tr>
<td></td>
<td>Community volunteer opportunities</td>
</tr>
<tr>
<td>Health Education Z550</td>
<td>Self-management workshops:</td>
</tr>
<tr>
<td></td>
<td>Diabetes Self-Management (Spanish version available)</td>
</tr>
<tr>
<td></td>
<td>Chronic Disease Self-Management (Spanish version available)</td>
</tr>
<tr>
<td></td>
<td>Chronic-Pain Self-Management</td>
</tr>
<tr>
<td></td>
<td>Cancer Thriving and Surviving</td>
</tr>
<tr>
<td></td>
<td>Falls Prevention (Stepping On, Matter of Balance, Tai Chi for Better Balance)</td>
</tr>
<tr>
<td></td>
<td>SAIL (Stay Active and Independent for Life)</td>
</tr>
<tr>
<td></td>
<td>Aging Mastery</td>
</tr>
<tr>
<td></td>
<td>Enhance Fitness</td>
</tr>
<tr>
<td></td>
<td>Lifelong Learning</td>
</tr>
<tr>
<td></td>
<td>Medication Management</td>
</tr>
<tr>
<td></td>
<td>Wellness Center Gym</td>
</tr>
</tbody>
</table>
Step 3: Monitor Client Progress and Quality of Services

The final but ongoing task is to monitor client progress with a care plan, re-screen clients as needed, and assure the quality of services provided.

Monitoring Progress: A Community Care Plan

A care plan outlines:
- individual assessed care needs,
- the types of services provided to meet those needs,
- who will provide the services and when.

And, it is person-centered and developed with input from the individual. Establishing regular contact with clients is imperative to addressing the range of SDOH that may be involved and also to provide regular, positive reinforcement for each step forward. This regular contact should be systematized, with responsibilities established and documentation incorporated.

Goals and action steps should be established with the client and a goal date should be established. Referrals to services or other staff should be made. Follow up dates are suggested for 30, 60, and 90 days, but these can be adjusted based on staff capacity. Follow up should be made to check in on progress toward goals, provide encouragement, and see if any additional referrals are needed. The updated status and referrals should be documented. This sample is an open format, but a standardized checklist could be provided if desired.

For example, consider an individual with diabetes. A malnutrition and SDOH screen are completed and the results are as follows: malnutrition (negative), personal safety (positive), health care referral (positive), and transportation (positive).

A sample care plan for this individual is provided below. This form can be sent to the healthcare provider along with the Referral Table in the previous section. Notice in the care plan below that the goal is person-centered, but it also addresses the healthcare provider's goal for an improvement in diabetes control.
Figure 2: Sample Community Care Plan - Initial and Follow Up Monitoring.

<table>
<thead>
<tr>
<th>CLIENT NAME: Sally Jones</th>
<th>DATE: January 1, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL (OUTCOME): Feel strong enough to attend grandson’s graduation.</td>
<td></td>
</tr>
<tr>
<td>ACHIEVE BY DATE: June 20, 2019</td>
<td></td>
</tr>
<tr>
<td>Step 1: Sign up for exercise class to build up strength.</td>
<td></td>
</tr>
<tr>
<td>Step 2: Set up doctor’s appointment to check on diabetes medications.</td>
<td></td>
</tr>
<tr>
<td>Step 3: Establish method of transportation to get to class/appointment.</td>
<td></td>
</tr>
<tr>
<td>NOTES: Referral made to Health Promotion Coordinator to enroll in Stepping On. Contacted doctor regarding positive screens. Faxed referral table, care plan. Assisted in getting a cab voucher for transportation.</td>
<td></td>
</tr>
<tr>
<td>DATE: January 1, 2019</td>
<td></td>
</tr>
<tr>
<td>STAFF SIGNATURE: Linda Johnson, MAP Program Coordinator</td>
<td></td>
</tr>
<tr>
<td>30 DAY FOLLOW UP: Mrs. Jones attended her first Stepping On class yesterday and has an appointment scheduled with her doctor. Rescreened for social determinants of health. No changes, no new referrals made.</td>
<td></td>
</tr>
<tr>
<td>DATE: February 4, 2019</td>
<td></td>
</tr>
<tr>
<td>STAFF SIGNATURE: Linda Johnson, MAP Program Coordinator</td>
<td></td>
</tr>
<tr>
<td>60 DAY FOLLOW UP:</td>
<td></td>
</tr>
<tr>
<td>DATE:</td>
<td></td>
</tr>
<tr>
<td>STAFF SIGNATURE:</td>
<td></td>
</tr>
<tr>
<td>90 DAY FOLLOW UP:</td>
<td></td>
</tr>
<tr>
<td>DATE:</td>
<td></td>
</tr>
<tr>
<td>STAFF SIGNATURE:</td>
<td></td>
</tr>
</tbody>
</table>
Quality Assurance

Quality assurance may include client satisfaction, evidence based workshop retention rates, fidelity monitoring of evidence-based classes, measuring of outcomes (e.g., hospital readmissions, ER visits, etc.), and monitoring staff adherence to protocols for documentation and communicating with healthcare. **Contracts with healthcare will often incorporate expectations for quality measurement, so it is important to consider what you currently do and what your organization might be willing to do in the future (assuming adequate funding and staffing).**

Be prepared to measure quality of services; emphasize the importance of quality and meeting established standards with your staff. Allowing significant variety in providing referrals or documentation will not support fruitful and long-term healthcare contracting for AAA services.

A recent report listed key factors for measuring the effectiveness and quality of home and community-based services, listed below. For additional quality assurance resources, see Appendix 6.

- Provides for a person-centered system that optimizes individual choice and control...
- Promotes social connectedness and inclusion …in accordance with individual preferences
- Includes a flexible range of services that are sufficient, accessible, appropriate, effective dependable and timely...
- Integrates healthcare and social services to promote well-being
- Promotes privacy, dignity, respect and independence....
- Ensures each individual can achieve the balance of personal safety and dignity of risk...
- Supplies and supports an appropriately skilled workforce...
- Supports family caregivers
- Engages individuals in the design, implementation, and evaluation of the system and its performance
- Reduces disparities by offering..services that are…culturally sensitive and linguistically appropriate
- Coordinates and integrates to best meet needs and maximize efficiency/affordability
- Delivers cost-effective services
- Supplies valid, meaningful, integrated, aligned, accessible, outcome-oriented data…
- Fosters accountability through measurement and reporting of quality of care and consumer outcomes
Chesapeake Regional Information System for Patients (CRISP)

When partnering with healthcare, an IT system is essential, especially for reimbursement purposes including tracking, reporting and billing. The Regional Health Information Exchange (HIE)- Chesapeake Regional Information System for Patients (CRISP), which serves Maryland, West Virginia, and the District of Columbia, has the capacity to allow AAAs to communicate with healthcare partners in real-time. Through a contract with CRISP, AAAs could:

- Embed referrals to evidence-based programs and other non-clinical services
- Report patient engagement, enrollment, and completion of programs
- Document provisions of programs and services (including ICD-10 codes)
- Alert providers of patient’s conditions, gaps, or needed services through care alerts

In addition, CRISP could be utilized to track return on investment (ROI), including pre/post hospital and emergency department utilization and changes in cost of care.

CRISP has begun to work with hospitals and community-based providers to begin tracking social determinants of health needs as well as referrals to evidence-based programs and community-based services. As this opportunity expands statewide, AAAs should be in the position to align with their hospital's or payor partner’s medical records technology and CRISP data sharing infrastructure.

Questions to Consider

1. What screening tools does your AAA already use and which clients are screened? Would it be feasible to implement an additional SDOH screening tool for all or select clients?
2. Looking at Table 2, what services/programs does your AAA offer to address each of the social determinants of health? Could you create your own form?
3. Do you currently document a “care plan” or “person centered plan of care”? If not, what would it take to implement one?
4. What does your current quality assurance structure look like? If you don’t have one in place, consider reviewing resources in Appendix 6.
Define Roles & Responsibilities

In this section, we’ll look at how AAAs can positively impact malnutrition by using a team approach. Traditionally, AAA staff members tend to work in “silos” and may not be aware of the full extent of activities happening across the organization. However, an interdisciplinary team approach is required to adequately support an older adult at risk for malnutrition. Malnutrition is not solved with food alone, although it is often a first step, but most clients will require a more comprehensive set of services. All of the SDOH domains previously discussed, including chronic conditions, financial limitations and social isolation need to be addressed.

Executive Director

As the lead administrator for your agency, creating the vision and services your organization delivers to existing and prospective clients, you can have an impact on healthcare costs while bringing in new revenue. You can work with your team as well as community healthcare partners to identify and treat malnutrition. A good place to begin is to estimate existing healthcare costs of malnutrition for individuals in your community.

In order to foster organizational commitment:

- Review existing resources and research best practices. Brainstorm ideas that are feasible given your existing resources.
- Establish cross-departmental meetings to develop healthcare-community linkages.
- Create a malnutrition coalition. Encourage your Board of Directors to reach out to healthcare providers, non-profits, community foundations and other community-based organizations (Visiting Nurses, Homemaker Services, etc.) to identify potential partners, coalition members and funding opportunities.

In order to become involved:

- Initiate meetings with hospital administration (Medical Director, Population Health, etc.) or discharge/social work personnel.
- Consider developing joint proposals with hospitals or health departments for grant opportunities which relate to providing healthcare in the community and/or preventive health approaches.
- Inform your stakeholders, including clients, caregivers, and government, about your initiatives. Enlist their in-kind support and financial resources.
- Identify which organizations in your community are paying the costs for malnourished seniors. Meet with them to understand discharge nutritional care
plans and potential service models which they feel could be appropriate for individuals discharged with malnutrition.

- Review alternative payment options for providing new or existing services. Consider starting with small changes or additions to services or assessment processes. Build a solid initial partnership model and deliver specific tasks.
- Identify organizations which provide a variety of support services that address all of the causes of malnutrition.

**Program Directors**

As a program director, you may see clients with lack of transportation, financial strain, issues with housing, social isolation, multiple chronic conditions, etc. which are all risk factors for malnutrition. You receive referrals and refer to services to address these social determinants of health and are therefore a key player in addressing malnutrition risk. To start, consider the many factors which can increase risk for malnutrition, including social, psychological, economic and health-related factors and think about how your organization can effectively support older adults to combat these issues.

In order to foster organizational commitment:

- Acknowledge pieces of the “malnutrition puzzle” that you can identify during screening.
- Work across your organization to determine what each department can do to screen or educate clients for their risk of malnutrition and offer validated tools.
- Consider existing and new initiatives which can address the social and environmental causes of malnutrition.
- Participate in cross-departmental meetings and list activities as potential items which your organization can use to identify or treat malnutrition.
- Support your Executive Director’s efforts and be prepared to learn more about what hospitals feel could be critical community supports for their patients. Assist with presentation materials which summarize your current services and consider adjusting them, based on healthcare partner feedback.

In order to become involved:

- Cross-refer to services and programs your organization offers.
- Provide follow-up with targeted client to ensure that individuals have received needed services.
- Provide information on resources, services, and benefits and assistance with completion of documents.
- Consider ways to provide regular updates to healthcare partners regarding client status and assist with supporting care plans.

**Cross-Referrals**

The figure below shows how interdisciplinary cross-referrals can be made to support an older adult at risk for malnutrition. As discussed in the previous section, **it is important that staff roles are established and streamlined documentation is implemented**. The team members roles below are *an example*, as staffing may vary across AAA’s and some staff members may oversee multiple program areas.

Figure 3: Interdisciplinary Team Approach to Address the Social Determinants of Health.

Key. HP= Health Promotion. SC= Senior Care.
Each AAA staff can support and inform a patient’s care plan, address the underlying causes of malnutrition, and communicate with healthcare partners regarding progress made and interventions implemented. See Appendix 7 for a more detailed list of suggested professional roles that align with the three steps of the community-based malnutrition care pathway.

**Questions to Consider**

1. Do you feel the suggested roles and cross-referrals apply to your agency?
2. What additional staff members might you include in the malnutrition pathway process?
Engage Partners

Partnership Scenarios

Consider implementing a variety of partnerships to provide programs and services to prevent and address malnutrition in your AAA jurisdiction.

Community Partners and Food Resources

Existing partnerships may be leveraged in the fight against malnutrition. For example:

- How can a transportation provider help with getting clients to a falls prevention class?
- Consider whether SNAP referrals are being maximized for low-income clients.
- Can congregate meal sites expand beyond senior centers and include partner organizations such as churches, soup kitchens or libraries?
- If you screen for depression, does your agency have a resource for referrals such as a local PEARLS provider, outpatient counselor or Core Services Agency?

For food insecure clients, there are a number of referrals that may be appropriate. See Appendix 8 for a sample Community Food Resource List.

- Contact your local food bank for a list of local resources and provide their number to persons inquiring about food access.
- Refer clients who need food to a congregate meal site, or refer to home delivered meals if they are homebound.
- Contact MDoA to become a local provider of the Commodity Supplemental Food Program (also known as “My Groceries to Go Program” in Maryland).
- Lastly, for individuals who are also suffering from chronic conditions, medically tailored food based on the “food is medicine” approach (see Establish a Vision and Path to Success section) may be a good choice for your organization.

Insurance Companies

In 2018 Congress enacted the Chronic Care Act, which allows additional supplemental benefits to Medicare beneficiaries enrolled in Medicare Advantage plans (MA). According to Title III of the Act, the changes are part of a MA value-based insurance design, allowing MA plans to create structures that vary benefits, cost-sharing, and supplemental benefits offered to enrollees with qualifying chronic diseases. As stated in the preamble of the Act, all of these changes are meant “to improve
management of chronic diseases, streamline care coordination, and improve quality outcomes.”

The measures will help the chronically ill get basic treatment at home, so that they can remain independent and out of the hospital. This will reduce the frequency of chronically ill patients needing hospitalization, which will free up room for non-chronic emergency room visits. This model approach will inform policymakers of the services that offer the most benefits to different populations, which may prompt policymakers to expand those benefits to people in the rest of traditional Medicare.

Beginning January 1, 2019, the Center for Medicare and Medicaid Services (CMS) expanded supplementary benefits to be "primarily health-related" if they were used to 1) diagnose an illness 2) compensate for physical impairments, 3) ameliorate the functional/psychological impact of injuries or health conditions or 4) reduce avoidable emergency and health care utilization.

Figure 4: Expansion of Supplemental Benefits in 2019.


The Bipartisan Budget Act of 2018 further expanded supplemental benefits by eliminating the "primary health-related" standard for individuals with chronic conditions, which essentially created a new category of benefits for 2020, which must have a “reasonable expectation of improving or maintaining health or overall function.” MA plans will expand to address SDOH, most notably nutrition, housing and transportation.
Figure 5: Further Expansion of Supplemental Benefits.

The Bipartisan Budget Act of 2018 eliminated the “primarily health-related” standard for supplemental benefits for individuals with chronic conditions, effectively establishing a new category of benefits, beginning in 2020.

Special Supplemental Benefits for the Chronically Ill (SSBCI)

- BBA specifies that MA plans may offer supplemental benefits that are *not primarily-health related*.
- Benefit must have a “reasonable expectation of improving or maintaining health or overall function.”
- Plans can target enrollees based on chronic condition and other factors, such as social determinants of health.

**May include**
- Non-medical transportation
- Home-delivered meals
- Food and produce

**May NOT include**
- Capital or structural improvements to the home that would increase its taxable value


There are several commercial insurance companies in Maryland offering the Medicare Advantage plans. These plans, starting January 2019, are required to offer the above services to their beneficiaries. Every year the insurance companies submit their benefits package to Medicare for approval in early June. For the insurance companies to be able to offer a particular benefit to its members, it has to be on this plan so it is accounted for in the premium they will charge the members. The major insurance companies that offer Medicare Advantage plans in Maryland are: Aetna, Cigna, Erickson, Humana, Johns Hopkins, Lasso and United Healthcare. A full listing can be found [here](https://nutritionandaging.org/wp-content/uploads/2019/03/Part-1_The-Evolving-Healthcare-Legislation-Landscape_Combined_Final.pdf).

**Regional AAA Partnerships**

With a national network of over 600 AAAs in the National Association of Area Agencies on Aging (n4a), AAAs have the capability to join together, regionally or statewide, to scale up services to a broader population. An example is the **Eastern Virginia Care Transitions Partnership**, a coalition of 5 AAAs, 4 health systems, 69 skilled nursing facilities, and 3 Medicaid managed care organizations. Discharged patients are referred by hospitals to AAAs for case management, referral assistance, benefits counseling, family caregiver support, and other non-clinical services including meals and transportation. Funding is supported by a per-member per-month reimbursement by the Medicaid MCOs. **The program led to a reduction in 30-day readmission rates from 18.2 to 8.9%, and avoided 1,804 readmissions with $17 million in savings.**

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Hospitals, PCPs, and CTOs

Maryland has a unique all payer hospital rate setting system whereby the Health Services Cost Review Commission (HSCRC) establishes uniform payment structures based on population health goals, which incentivizes cost reduction.

In 2019, the Maryland Department of Health (MDH) rolled out the Maryland Comprehensive Primary Care Model (MDPCP), designed to expand improvements in care and reductions in the growth of healthcare spending from hospitals to community-based healthcare providers such as primary care providers, skilled-nursing facilities, home health providers, and others. In 2019, newly created Care Transition Organizations (CTOs) began working with these providers to assist them with care management, data tools and informatics, practice transformation technical assistance, social services connections, hospital care coordination and behavioral health integration. A list of the CTOs for 2019 can be found here.

Figure 6: The Maryland Primary Care Program Structure.

Across the state of Maryland there are approximately 386 primary care practices enrolled in this program (as of May 2019). The MDPCP supports the overall health care transformation process and allows primary care providers to play an increased role in prevention and management of chronic disease and prevention of unnecessary hospital utilization. Each primary care practice that has enrolled in the MDPCP program receives a care management fee (CMF) per attributed Medicare beneficiary in the practice. This CMF is to be used by the practice to help with patient needs for care coordination with social service resources and access to care as determined by the practice. AAAs can
partner (ie, have contracts) with primary care practices and provide care coordination services to get reimbursed with a portion of the CMF.

Another alternative could be partnering with area CTOs for specific services (home delivered meals, housing assistance etc.) to receive payment for services rendered. Any partnership or contractual arrangement would depend on each AAA’s capacity for types of services they provide and would depend on the CTO’s perceived needs.

Examples of Success

The MAC, Inc. Living Well Center of Excellence (LWCE) has established contracts with multiple hospitals in their regional area. Many of these partnerships began with referrals for Chronic Disease Self-Management Education (CDSME) workshops. Based on successful outcomes through consistent data reporting, these partnerships have expanded to include other programs offered by the AAA and have resulted in reimbursement for these services.

The Southern Maine Agency on Aging (SMAA) has also had success at developing contractual agreements with a number of local hospitals, health plans, and medical practices. The chief executive officer, Larry Gross, states that he was motivated to “really address our mission to improve quality of life for older adults, and to work more closely with others who shared our interests.” SMAA initiated these partnerships by inviting heads of local health plans and hospitals to join their board of directors. Gross emphasizes that his keys to success were talking about contracts up front, instead of performing work for free, and utilizing volunteers, who gave 80,000 hours of service in 2016, and allowed their agency to increase service volume by 25%.

Billing Reimbursement Options

ICD-10 codes are used by physicians, insurance companies, public health agencies and organizations, etc. to represent diagnoses. ICD-10 stands for International Statistical Classification of Diseases and Related Health Problems 10th Revision; it is published, copyrighted, and updated by the World Health Organization. There is an ICD-10 code for every disease, disorder, injury, infection and symptom and they are utilized in many ways, including processing health insurance claims and compiling national health statistics. ICD-10 codes Z55-Z65 capture socioeconomic and psychosocial circumstances (i.e. social determinants of health).
Below is a shortened list of the ICD-10 codes for social determinants of health that are most relevant to AAAs. Under each of the SDOH categories there are more specific codes pertaining to situations. The categories point out where to look for more specific codes if needed. For an extended list of SDOH ICD-10 codes, click here. Identification and coding with the appropriate Z code for SDOH reflects the risk an individual is at for poor health outcomes.

These Z codes show the “risk” for individuals, which may result in a higher care management fee (CMF) paid by Medicare to primary care. In other words, Z codes = higher risk= higher potential reimbursement. AAAs could partner with these healthcare organizations to provide case management and document social needs with the ICD-10 codes. This CMF could then be utilized to pay the AAA. In another scenario, this coding has the potential to show insurance companies that these individuals need services like housing, meals etc. which would directly/indirectly be paid by them.

Table 3: Social Determinants of Health ICD-10 Codes.

<table>
<thead>
<tr>
<th>SDOH</th>
<th>Sample ICD-10 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Situation</td>
<td>Z590 - Problems related to housing and economic circumstances</td>
</tr>
<tr>
<td>(Housing, Utilities)</td>
<td>Z600 - Problems related to social environment</td>
</tr>
<tr>
<td></td>
<td>Z602 - Problems related to living alone</td>
</tr>
<tr>
<td>Food</td>
<td>Z590 - Problems related to housing and economic circumstances</td>
</tr>
<tr>
<td></td>
<td>Z594 - Lack of adequate food and safe drinking water</td>
</tr>
<tr>
<td>Safety</td>
<td>Z600 - Problems related to social environment</td>
</tr>
<tr>
<td>Financial Strain</td>
<td>Z590 - Problems related to housing and economic circumstances</td>
</tr>
<tr>
<td>Employment</td>
<td>Z560 - Problems related to employment and unemployment</td>
</tr>
<tr>
<td>Family and Community</td>
<td>Z630 - Other problems related to primary support group, including</td>
</tr>
<tr>
<td>Support</td>
<td>family circumstances</td>
</tr>
<tr>
<td></td>
<td>Z600 - Problems related to social environment</td>
</tr>
<tr>
<td>Education</td>
<td>Z550 - Problems related to education and literacy</td>
</tr>
<tr>
<td>Mental Health</td>
<td>Z650 - Problems related to other psychosocial circumstances</td>
</tr>
</tbody>
</table>
**SCENARIO ONE**

Suzy,* who is the sole caregiver for her 78 year old bed bound mother, was referred by her church to the local AAA. Suzy revealed that she had reached her breaking point and needed help but did not have the resources to pay for assisted living or caregivers from a private agency.

Through the screening process by MAP, Suzy’s mother was identified at risk for:

➔ Living arrangements: Z599
➔ Financial: Z596
➔ Food and nutrition: Z594
➔ In Home care: Z602
➔ Social support: Z600

In addition, Suzy herself was identified with the following risk factors:

➔ Dependent needing care: Z636
➔ Burnout: Z730
➔ Lack of relaxation and leisure: Z732

Suzy’s mother was set up with the following services by the AAA:

1. Respite care through the local ARC.
2. Caregiver program and support group.
3. Home-delivered meals 3 times per week.
4. In-home care 4 hours a day for 5 days per week (waiting list).
5. Connection with a local bible group and volunteer from the local school 1-2 times per week.

MAP staff encouraged Suzy to call her mother’s insurance company, Aetna Medicare Advantage, and check her benefit eligibility. Suzy found the Aetna MA plan would pay for in-home care and meals as long as the primary care physician (PCP) did the pre-authorization.

The AAA faxed the referral to the PCP for needed services with the ICD-10 codes for SDOH. The PCP used the codes to get the services covered. Aetna MA plan reimbursed the AAA for the meals and the private agency providing the caregiver. In addition, Suzy herself was given resources and connected to caregiver support groups near her.
SCENARIO TWO

Barbara* is an 85 year old who lives alone in a one bedroom apartment. She had multiple admissions to community hospital emergency room. The Emergency Room Department staff determined that there were no significant medical issues but that Barbara was struggling with anxiety.

The PCP took on the patient and their Nurse Practitioner (NP) did a home visit:
- Barbara was not taking her medications and many of them were expired.
- There was almost no food in the refrigerator.
- Barbara asked for water and stated she was hungry. Her lips and mouth were dry.

The NP referred Barbara to an on-staff Social Worker and Registered Dietitian (RD). The RD brought nutritional supplements; the patient declined a referral for home-delivered meals.

The family expressed they were unable to assist with Barbara’s care. The PCP felt it was an unsafe environment and referred the case to Adult protective services (APS) of the county.

The following diagnosis codes were identified for this situation:
- Living arrangements: Z599
- Financial: Z596
- Food and nutrition: Z594
- Living alone: Z602

Preferred solution: This client would have been better served if referred to the AAA by the hospital and PCP.

Under the Care Redesign program and the MDPCP, the AAA could have been identified as the community resource to provide support to the patient, saving the PCP significant time resources and better meeting the needs of the client.

*Names have been changed to protect privacy.
**Initiating Conversations with Healthcare**

Meetings with prospective healthcare partners should outline:

1. Identify what the healthcare partner is most concerned about.
2. Share the specific services and programs provided by your organization which address SDOH and health conditions (or risks for health conditions) that can reduce their costs.
3. Formulate an agreeable initial service for funding, based on quality and outcome measures that will be transparent to both parties.
4. Once successful, continue to develop the partnership to incorporate additional programs/services. A promising approach is shared risk contracting.

Contracting with healthcare can be complicated, with many options, opportunities and pitfalls. AAAs are strongly encouraged to seek out resources and experienced peers to learn about the best approach for your organization. Appendix 9 shares presentations you can customize for meetings with healthcare and Appendix 10 contains additional website resources.

As demonstrated in this and earlier sections, **ongoing support, communication among AAA staff and healthcare, with adequate documentation, are key components of addressing malnutrition and health conditions in the community.**

**Questions to Consider**

1. *Do you have existing partnerships, programs and services that can help clients address their risk for malnutrition? If yes, how can you create an internal system to manage these clients?*
2. *Are you ready to meet with healthcare organizations - a hospital, insurance company or PCP - to create a contractual cross-referral relationship? If not, what resources do you need?*
3. *Which ICD-10 codes fit with services you are already providing or referring clients to?*
Conclusion

In summary, “Addressing Malnutrition in Community Living Older Adults: A Toolkit for Area Agencies on Aging” has shared:

- How the problem of malnutrition in our communities is relevant to the aging network’s core mission to “Maximize the independence, well-being, and health of older adults”
- Why AAAs are critical partners for healthcare and Maryland’s unique payment system, to smooth malnourished patients’ transitions of care and prevent malnutrition in community-residing older adults.
- The importance of establishing a vision and path to success by defining a project mission and assigning staff roles, documenting processes, and embedding quality assurance.
- How to develop your organization’s “community-based malnutrition care pathway.”
- The importance of engaging partners - new and existing - to create an effective, high quality process to expand resources and service offerings.

The toolkit also provided you with:
- Template forms that incorporate ICD-10 codes
- Internal and external cross-referral suggestions
- Case studies
- Questions to consider as you develop your plans
- Sample healthcare presentations and discussion tips

We hope you have found this toolkit helpful! The journey towards effective management and elimination of community-based older adult malnutrition is just beginning. We welcome you to join us in this emerging endeavor.
# Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Area Agency on Aging</td>
</tr>
<tr>
<td>ACL</td>
<td>Administration for Community Living</td>
</tr>
<tr>
<td>ADL</td>
<td>Activities of Daily Living</td>
</tr>
<tr>
<td>ADRC</td>
<td>Aging and Disability Resource Center</td>
</tr>
<tr>
<td>ALS</td>
<td>Amyotrophic Lateral Sclerosis</td>
</tr>
<tr>
<td>APS</td>
<td>Adult Protective Services</td>
</tr>
<tr>
<td>CBO</td>
<td>Community-Based Organization</td>
</tr>
<tr>
<td>CDSME</td>
<td>Chronic Disease Self-Management Education</td>
</tr>
<tr>
<td>CHF</td>
<td>Congestive Heart Failure</td>
</tr>
<tr>
<td>CHW</td>
<td>Community Health Worker</td>
</tr>
<tr>
<td>CMF</td>
<td>Case Management Fee</td>
</tr>
<tr>
<td>CMS</td>
<td>Center for Medicare and Medicaid Services</td>
</tr>
<tr>
<td>CRISP</td>
<td>Chesapeake Regional Information System for Patients</td>
</tr>
<tr>
<td>CSFB</td>
<td>Commodity Supplemental Food Program</td>
</tr>
<tr>
<td>CTO</td>
<td>Care Transformation Organization</td>
</tr>
<tr>
<td>EMR</td>
<td>Electronic Medical Record</td>
</tr>
<tr>
<td>EMT</td>
<td>Emergency Medical Technician</td>
</tr>
<tr>
<td>EUSP</td>
<td>Electric Universal Service Program</td>
</tr>
<tr>
<td>ER</td>
<td>Emergency Room</td>
</tr>
<tr>
<td>HDM</td>
<td>Home-Delivered Meal</td>
</tr>
<tr>
<td>HIE</td>
<td>Health Information Exchange</td>
</tr>
<tr>
<td>HP</td>
<td>Health Promotion</td>
</tr>
<tr>
<td>HSCRC</td>
<td>Health Services Cost Review Commission</td>
</tr>
<tr>
<td>ICD-10</td>
<td>International Statistical Classification of Disease and Related Health Problems, 10th Revision</td>
</tr>
<tr>
<td>IDEAS</td>
<td>Identifying Depression, Empowering Activities for Seniors</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>LIHEAP</td>
<td>Low-Income Home Energy Assistance Program</td>
</tr>
<tr>
<td>LTSS</td>
<td>Long Term Services &amp; Supports</td>
</tr>
<tr>
<td>LWCE</td>
<td>Living Well Center of Excellence</td>
</tr>
<tr>
<td>MA</td>
<td>Medicare Advantage</td>
</tr>
<tr>
<td>MAC</td>
<td>Maintaining Active Citizens</td>
</tr>
<tr>
<td>MAP</td>
<td>Maryland Access Point</td>
</tr>
<tr>
<td>MCO</td>
<td>Managed Care Organization</td>
</tr>
<tr>
<td>MDH</td>
<td>Maryland Department of Health</td>
</tr>
<tr>
<td>MDPCP</td>
<td>Maryland Primary Care Program</td>
</tr>
<tr>
<td>MNT</td>
<td>Medical Nutrition Therapy</td>
</tr>
<tr>
<td>MQii</td>
<td>Malnutrition Quality Improvement Initiative</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>MST</td>
<td>Malnutrition Screening Tool</td>
</tr>
<tr>
<td>NP</td>
<td>Nurse Practitioner</td>
</tr>
<tr>
<td>n4a</td>
<td>National Association of Area Agencies on Aging</td>
</tr>
<tr>
<td>PCP</td>
<td>Primary Care Provider</td>
</tr>
<tr>
<td>PEARLS</td>
<td>Program to Encourage Active, Rewarding Lives</td>
</tr>
<tr>
<td>RDN</td>
<td>Registered Dietitian Nutritionist</td>
</tr>
<tr>
<td>RD</td>
<td>Registered Dietitian</td>
</tr>
<tr>
<td>ROI</td>
<td>Return on Investment</td>
</tr>
<tr>
<td>SAIL</td>
<td>Stay Active and Independent for Life</td>
</tr>
<tr>
<td>SALGHS</td>
<td>Senior Assisted Living Group Home Subsidy</td>
</tr>
<tr>
<td>SDOH</td>
<td>Social Determinants of Health</td>
</tr>
<tr>
<td>SHIP</td>
<td>Senior Health Insurance Program</td>
</tr>
<tr>
<td>SIREN</td>
<td>Social Interventions Research &amp; Evaluation Network</td>
</tr>
<tr>
<td>SMAA</td>
<td>Southern Maine Agency on Aging</td>
</tr>
<tr>
<td>SNAP</td>
<td>Supplemental Nutrition Assistance Program</td>
</tr>
<tr>
<td>SUYN</td>
<td>Stepping Up Your Nutrition</td>
</tr>
<tr>
<td>SW</td>
<td>Social Worker</td>
</tr>
<tr>
<td>USPP</td>
<td>Universal Services Protection Program</td>
</tr>
</tbody>
</table>
References


Appendices

Appendix 1: Malnutrition Resources

- Alliance for Aging Research-Malnutrition in Older Adults
- American Society for Parenteral and Enteral Nutrition Malnutrition Toolkit
- Defeat Malnutrition Today
- Malnutrition Quality Improvement Initiative (MQii) Toolkit
- National Council on Aging Community Malnutrition Resource Hub
- National Council on Aging Malnutrition Toolkit
- National Resource Center on Nutrition & Aging
- The Gerontological Society of America
Appendix 2: Evidence-Based Programs in Maryland

- Aging Mastery Program
- Arthritis Foundation Classes (Aquatics, Exercise Program, Tai Chi, Walk with Ease)
- Diabetes Prevention Program (Medicare, National)
- Enhance Fitness
- Enhance Wellness
- Healthy Eating for Successful Living in Older Adults
- HomeMeds
- Matter of Balance
- Move with Balance
- Otago
- Powerful Tools for Caregivers
- Program to Encourage Active and Rewarding Lives (PEARLS)
- Self-Management Programs (Chronic Disease, Chronic Pain, Cancer Thriving & Surviving, Diabetes, Spanish versions)
- Stay Active and Independent for Life (SAIL)
- Stepping On
- Tai Ji Quan: Moving for Better Balance
- TimeSlips

The MAC, Inc. LWCE website contains descriptions about each program, flyers, and links to workshop registration: https://www.mdlivingwell.org/programs/
### Appendix 3: Screening Tools Currently Required for Maryland AAA’s

<table>
<thead>
<tr>
<th>Screening Tool</th>
<th>Details</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1 Screen</strong></td>
<td><strong>Purpose:</strong> Screen and triage individuals for Medicaid community programs, including the Community Options waiver, Community First Choice, and Medical Assistance Personal Care. <strong>Components:</strong> ● Instrumental Activities of Daily Living ● Activities of Daily Living ● Living Arrangement ● Health Status ● Communication, Cognition and Behavior ● Financial Questions ● Referral Questions <strong>Length:</strong> Thirty one questions <strong>Score:</strong> Priority category and referral recommendations generated</td>
<td>● Determine functional eligibility for Medicaid community services ● Provide information, referrals, Options Counseling and access to home and community-based services</td>
</tr>
<tr>
<td><strong>DETERMINE Your Nutritional Health (Nutrition Screening Initiative)</strong></td>
<td><strong>Purpose:</strong> Identify persons at risk for poor nutrition, based upon SDOH. <strong>Components:</strong> ● Disease ● Eating poorly ● Tooth loss/mouth pain ● Economic hardship ● Alcohol problems ● Reduced social contact ● Multiple medications ● Involuntary weight loss/gain ● Ability to shop, cook and/or feed self <strong>Length:</strong> Ten questions <strong>Score:</strong> 0-2 not at risk, 3-5 moderate nutritional risk, 6 + high nutritional risk</td>
<td>● Home delivered or congregate meal program ● RDN counseling or nutrition education ● Social and exercise programming to address isolation ● Dental referral ● Social services or community group if elevated alcohol intake noted ● Physician/pharmacy or medication management referral if multiple medications noted ● Financial assistance if unable to afford medications and/or food</td>
</tr>
<tr>
<td><strong>Home Delivered Meals Priority Screening</strong></td>
<td><strong>Purpose:</strong> Effectively identify persons most at need for meals and to determine other services which may best meet clients’ current needs. <strong>Components:</strong> ● Ability to acquire groceries and prepare meals ● Food insecurity assessment <strong>Length:</strong> Eight questions <strong>Score:</strong> A-E levels of priority</td>
<td>Determine if client would benefit most from: ● Fully prepared home-delivered meals ● Income eligibility review and/or SNAP ● Grocery assistance, including the Commodity Supplemental Food Program</td>
</tr>
</tbody>
</table>

**Appendix 3:** Screening Tools Currently Required for Maryland AAA’s

**Level 1 Screen**

**Purpose:** Screen and triage individuals for Medicaid community programs, including the Community Options waiver, Community First Choice, and Medical Assistance Personal Care.

**Components:**
- Instrumental Activities of Daily Living
- Activities of Daily Living
- Living Arrangement
- Health Status
- Communication, Cognition and Behavior
- Financial Questions
- Referral Questions

**Length:** Thirty one questions

**Score:** Priority category and referral recommendations generated

**Use:**
- Determine functional eligibility for Medicaid community services
- Provide information, referrals, Options Counseling and access to home and community-based services

**DETERMINE Your Nutritional Health (Nutrition Screening Initiative)**

**Purpose:** Identify persons at risk for poor nutrition, based upon SDOH.

**Components:**
- Disease
- Eating poorly
- Tooth loss/mouth pain
- Economic hardship
- Alcohol problems
- Reduced social contact
- Multiple medications
- Involuntary weight loss/gain
- Ability to shop, cook and/or feed self

**Length:** Ten questions

**Score:** 0-2 not at risk, 3-5 moderate nutritional risk, 6 + high nutritional risk

**Use:**
- Home delivered or congregate meal program
- RDN counseling or nutrition education
- Social and exercise programming to address isolation
- Dental referral
- Social services or community group if elevated alcohol intake noted
- Physician/pharmacy or medication management referral if multiple medications noted
- Financial assistance if unable to afford medications and/or food

**Home Delivered Meals Priority Screening**

**Purpose:** Effectively identify persons most at need for meals and to determine other services which may best meet clients’ current needs.

**Components:**
- Ability to acquire groceries and prepare meals
- Food insecurity assessment

**Length:** Eight questions

**Score:** A-E levels of priority
# Appendix 4: MAC Inc. Maryland Living Well Center of Excellence
## Social Determinants of Health Screening Tool

Name: ___________________________________________ Phone Number: _______________________________

Preferred Language: _____________________________ Best time to call: _______________________________

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
<th>NOTES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, has your utility company shut off your service for not paying your bills?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you worried that in the next 2 months, you may not have stable housing?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have difficulty in taking the medicine/prescriptions prescribed by your doctor?</td>
<td></td>
<td></td>
<td>Are you able to get/pay for your medicine? Do you understand what medicine to take when and what it is for?</td>
</tr>
<tr>
<td>In the last 12 months, have you needed to see a doctor but could not because of cost?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the last 12 months, have you ever had to go without health care because you didn’t have a way to get there?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I see or talk to family members at least once a week.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I see or talk to friends at least once a week.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you ever need help reading or understanding hospital or other materials from your physician?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you afraid you might be hurt in your apartment building or house?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the past three months, have you had a fall? If you fell in the past three months, how many times did it limit your regular activities for at least a day, or you saw a doctor?</td>
<td></td>
<td></td>
<td>Do you worry about falling?</td>
</tr>
<tr>
<td>#</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over the past two weeks, have you had little interest or pleasure in doing things, or felt down, depressed, or hopeless?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you checked “YES” to any boxes above, would you like to receive assistance with any of these needs?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are any of your needs urgent? (i.e., “I don’t have food or a place to sleep tonight”)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Screened by: ___________________________ Referred to: ___________________________ Date: ___________________________
Appendix 5: List of Malnutrition and Social Determinants of Health Screening Tools

Malnutrition

- Malnutrition Screening Tool (MST)
- Mini Nutritional Assessment (MNA)
  - a. MNA-Short Form (MNA-SF)
- Malnutrition Universal Screening Tool (MUST)
- Nutrition Risk Screening (NRS-2002)
- Subjective Global Assessment (SGA)
- Patient Generated Subjective Global Assessment (PG-SGA)
- Seniors in the Community: Risk Evaluation for Eating and Nutrition (SCREEN I and SCREEN II)
- Short Nutritional Assessment Questionnaire (SNAQ)
- Validated Malnutrition Screening and Assessment Tools: Comparison Guide

Social Determinants of Health

- Accountable Health Communities Health-Related Social Needs Screening Tool
- PRAPARE: Protocol for Responding to and Assessing Patients’ Assets, Risks, and Experiences
- Health Leads Social Needs Screening Toolkit
- Institute of Medicine Social and Behavioral Domains and Measures
- WellRx Toolkit
- Total Health Assessment Questionnaire for Medicare Members
- Kaiser Permanente’s Your Current Life Situation Survey
- HealthBegins Upstream Risk Screening Tool
- Social Need Screening Tools Comparison Table
Appendix 6: Quality Assurance Resources

- Home and Community Based Services: Quality Management Roles and Responsibilities
- Improving Quality of Services
- Measuring the Quality of Home- and Community-Based Services: A Conversation about Strategic Directions for Research and Policy
- Quality Measurement for Home and Community Based Services (HCBS) and Behavioral Health in Medicaid
- Quality in Home and Community-Based Services to Support Community Living: Addressing Gaps in Performance Measurement
- Quality of Home- and Community-Based Services
Appendix 7: Suggested Professional Role Delineation

MAP
Implement Screening Tools
- Level 1 Screen
- Malnutrition Screen
- SDOH Screen

Address Root Cause(s)
- Enroll/refer to Nutrition, HP, Senior Care, and/or SHIP.
- Refer to behavioral health, caregiver support, physician, CHW
- Transportation to healthcare appointments and referral sites
- Groceries program, pet food, call reassurance, etc.

Monitor Progress and Quality
- Lead care plan implementation and documentation
- Track referrals
- Share client care plan goals with healthcare
- Assist with hospital messages and progress

Nutrition
Implement Screening Tools
- DETERMINE Checklist
- HDM PriorityScreen
- Malnutrition Screen
- SDOH Screen

Address Root Cause(s)
- Enroll/refer to MAP, HP, Senior Care and/or SHIP
- Person centered service/meal plan
- Provide social interaction
- Provide relevant nutrition education
- Nutritionally balanced food, hydration
- Reduce social isolation
- Manage chronic conditions

Monitor Progress and Quality
- Periodic screening, as appropriate, note in care plan
- Inform care plan as new service options become available and seem appropriate
- Perform quality assurance related to respective service(s)
- Update care plan as client participates in programs
- Adjust care plan as information changes
- Assist with communicating hospital messages

SHIP
Implement Screening Tools
- Benefits Checkup
- Malnutrition Screen
- SDOH Screen

Address Root Cause(s)
- Enroll/refer to MAP, Nutrition, HP and/or Senior Care
- Address gaps in insurance coverage (income)
• Reduce stress and financial concerns related to billing and potential fraud
• Allows client to access affordable medical care and medications

Monitor Progress and Quality
• Periodic screening, as appropriate, note in care plan
• Inform care plan as new service options become available and seem appropriate
• Perform quality assurance related to respective service(s)
• Update care plan as client participates in programs
• Adjust care plan as information changes
• Assist with communicating hospital messages

Health Promotion
Implement Screening Tools
• Varies based on program staff certifications
• Malnutrition Screen
• SDOH Screen

Address Root Cause(s)
• Enroll/refer to MAP, Nutrition, Senior Care and/or SHIP
• Chronic disease management
• Exercise to improve strength
• Improve nutrition/malnutrition
• Social isolation
• Address falls risk
• PEARLS to address depression

Monitor Progress and Quality
• Periodic screening, as appropriate, note in care plan
• Inform care plan as new service options become available and seem appropriate
• Perform quality assurance related to respective service(s)
• Update care plan as client participates in programs
• Adjust care plan as information changes
• Assist with communicating hospital messages

Senior Care
Implement Screening Tools
• Level 1 Screen
• Malnutrition Screen
• SDOH Screen

Address Root Cause(s)
• Enroll/refer to MAP, Nutrition, HP and/or SHIP
• Refer to behavioral health, caregiver support, physician, CHW
• Provide PEARLS or refer to other mental health supports

Monitor Progress and Quality
• Periodic screening, as appropriate, note in care plan
• Inform care plan as new service options become available and seem appropriate
• Perform quality assurance related to respective service(s)
• Update care plan as client participates in programs
• Adjust care plan as information changes
• Assist with communicating hospital messages
Appendix 8: Sample Community Food Resource List

Food and Nutrition Assistance in Somerset County 2019
Worrying about whether or not you will have enough food is stressful. Regular, nutritious meals are necessary for seniors to stay healthy. The following resources are here to help you.

<table>
<thead>
<tr>
<th>Food Needs</th>
<th>Program Name</th>
<th>Number</th>
<th>Contact Name</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>For homebound: Delivered meals &amp; Grocery bags</td>
<td>Meals on Wheels by Somerset MAC Senior Services</td>
<td>410-651-3400</td>
<td>All staff</td>
<td>Delivered meals Monday, Tuesday, Thursday, for 60 and older</td>
</tr>
<tr>
<td>Therapeutic Home Delivered Meals</td>
<td>Moveable Feast</td>
<td>410-327-3420 Ext. 12</td>
<td>All staff</td>
<td>Delivered frozen meals for all ages</td>
</tr>
<tr>
<td>Senior Center Noon Meals</td>
<td>Westover and Deal Island MAC Senior Services Centers</td>
<td>410-651-3400</td>
<td>All staff</td>
<td>Noon meal Tuesday and Thursday for 60 and older</td>
</tr>
<tr>
<td>Dinner Friday &amp; Saturday 6-7:30 PM</td>
<td>H.O.P.E. Ministry 11724 Somerset Ave, Princess Anne</td>
<td>410-726-7910 or 443-880-7871</td>
<td>Steve Milligan Wayne Muir</td>
<td>Eat dinner and take home a bag lunch</td>
</tr>
<tr>
<td>Nutrition Education and Supplement Assistance</td>
<td>MAC Registered Dietitian</td>
<td>410-742-0505 Ext. 144</td>
<td>Karla Beardsley</td>
<td>Call for appointment or questions</td>
</tr>
<tr>
<td>Nutrition Counseling</td>
<td>McCready Hospital Dietitian</td>
<td>410-968-1801 Ext. 3250</td>
<td>Jeannette Jardin</td>
<td>Call for appointment</td>
</tr>
<tr>
<td>Food Stamps (SNAP)</td>
<td>Social Services 30397 Mt. Vernon Rd, Princess Anne</td>
<td>410-677-4330</td>
<td>All Staff</td>
<td>Need proof of address, income, expenses, SS card, and picture ID</td>
</tr>
<tr>
<td>Emergency and monthly food pantry</td>
<td>Maryland Food Bank-Eastern Shore</td>
<td>410-742-0050</td>
<td>Teresa See Jennifer Small</td>
<td>Find a food pantry close by <a href="http://www.mdfoodbank.org">www.mdfoodbank.org</a> click “find food”</td>
</tr>
<tr>
<td>Emergency and monthly food pantry “Food Share”</td>
<td>Seton Center Catholic Charities</td>
<td>410-651-9608</td>
<td>All Staff</td>
<td>Need proof of address, income, food stamps, SS card, and picture ID</td>
</tr>
<tr>
<td>Grocery Shopping Online</td>
<td>Walmart Pocomoke City Supercenter</td>
<td>410-957-9600</td>
<td>All Staff</td>
<td>Order at <a href="http://www.walmart.com">www.walmart.com</a> and pick up at store</td>
</tr>
</tbody>
</table>
Appendix 9: Sample Presentations for Healthcare

A Guide to Aging and Disability Services
Presented by:
MAC, Inc. Living Well Center of Excellence &
Baltimore City Health Department

Older Americans Act of 1965
Older Americans Act of 1965 was the first federal level initiative aimed at providing comprehensive services for older adults. Through this act, Area Agencies on Aging at the local level were developed.

In the Aging Network
AAA Means
Area Agency on Aging

The Mission
The Maryland Department of Aging in partnership with 23 Area Agencies provides leadership and advocacy to Maryland seniors and their families through information, education and services.

23 Area Agencies on Aging

AAA Services
- Information & Assistance (MAP)
- Adult Evaluation & Review Services (AERS)
- Personal Care
- Home Delivered Meals
- Adult Day Care/Day Health
- Congregate Meals
- Transportation & Taxi Card
- Ombudsman Program
- Hospice & Home Health
- Health Promotion & Education
- Long Term Care Advocacy Program
- Senior Care Case Management
- Medicaid Waivers/Community First Choice
- Public Guardianship
- Legal Assistance
- Tax Aid Program
- Senior Assisted Group Home Subsidy Program
- SHIP (State Health Insurance Assistance Plan)
- Family Caregiver Support

Maryland Access Point
http://www.marylandaccesspoint.info/
1-844-MAPLINK / 1-844-627-5465

Explanation of Services
Presented by Liz Briscoe
Baltimore City Health Department
Division of Aging and CARE Services
“No Wrong Door” Maryland Access Point (MAP) 1-844-MAPLINK
Provides information and access to a wide range of services including social security, housing, health care, transportation, legal assistance, and leisure activities. This information resource is available to everyone at no cost, regardless of income.

Community Personal Assistance/Community First Choice
- Clients receive in-home, individualized plans of services that may delay or prevent nursing home placement.
- Eligibility: No age requirement, however, client must be eligible for Medicaid.

Senior Care Program
Provides services that will support aging in place.
- Available services:
  - Personal care
  - Light housekeeping
  - Meal preparation
  - Nursing care
  - Shopping
  - Transportation
- Eligibility: Age 65 or older. Must meet income and medical guidelines.

Ombudsman Program
- Provides investigation & resolution of complaints in nursing homes and assisted living facilities
- Mediates disputes
- AAA Ombudsmen investigate complaints within 24 hours and provide information on regulations
- Provides in-service training on topics such as residents’ rights, psycho-social needs, difficult behaviors, sexuality, communication, and dignity, among others.
- Program is not a 24-hour emergency response service

Senior Health Insurance Program (SHIP)
- Provides information and individual counseling for Medicare and health insurance questions.
- Helps in selecting health insurance coverage, filling out complicated forms, and Interact on their behalf when necessary.
- Assistance with enrollment in Low Income Subsidy Programs for Medicare recipients.

Housing Services/ Sr Assisted Group Home Subsidy Program
For low income seniors, this program provides access to assisted living in small group homes (4 – 16 residents) which are licensed by the State of Maryland.
- Eligibility:
  - At least 62 years of age
  - Physically or mentally impaired and in need of assistance with ADLs.
  - Financially eligible

Public Guardianship
Adult Public Guardianship provides protection and advocacy on behalf of adult adults who are determined in a court of law to lack the capacity to communicate reasonable decisions concerning their daily living needs.
- An Executive Director of the Adult Agency, an Aging Services marketplace in a legal setting.
- A public guardian can be appointed if a person exhibits an inability to make reasonable decisions due to:
  - Effects of illness or disability
  - Mental confusion/forgetfulness
  - Inability to manage money or business affairs
  - Inability to meet physical needs such as food, shelter, bathing, medical needs.

Legal Services
Maryland Legal Aid provides a full range of legal services to financially qualified Maryland residents, including:
- Consumer rights
- Elder rights
- Employment
- Family
- Government benefits
- Health care
- Housing
Mealson Wheels
Provides a life-giving service to the homebound elderly who are confined to bed, lack transportation, or are too frail to cook for themselves

National Family Caregivers Program

Services:
• Provides support for caregivers
• Provides caregiving training
• Connects caregivers to available services
• Keeps track

Eligibility:
• Adult family members or other informal caregivers age 18 and older who provide care to individuals age 60 and older
• Adult family members or other informal caregivers age 18 and older who provide care to individuals of any age with Alzheimer’s disease and related disorders
• Resources available for grandparents as well

Area Agency on Aging Contact Info (MAP contacts)

<table>
<thead>
<tr>
<th>County</th>
<th>MAP Contact</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltimore City</td>
<td>Liz Brence</td>
<td><a href="mailto:lizb@bhcheroe.org">lizb@bhcheroe.org</a></td>
<td>410-545-9967</td>
</tr>
<tr>
<td>Baltimore County</td>
<td>Peggy Miller</td>
<td><a href="mailto:pegym@bcgg.asc">pegym@bcgg.asc</a></td>
<td></td>
</tr>
<tr>
<td>St. Mary’s County</td>
<td>Jennie Bayley</td>
<td><a href="mailto:jennieve@stmarys.md.gov">jennieve@stmarys.md.gov</a></td>
<td>410-470-3300</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>Jennifer Long</td>
<td><a href="mailto:jenniferc@gov.montgomery.md.gov">jenniferc@gov.montgomery.md.gov</a></td>
<td>301-266-3806</td>
</tr>
<tr>
<td>Prince George’s Co.</td>
<td>Elizabeth McGarvey</td>
<td>elizabeth.mcg</td>
<td></td>
</tr>
<tr>
<td>Howard County</td>
<td>Christopher Means</td>
<td><a href="mailto:christophermeans@email.com">christophermeans@email.com</a></td>
<td>301-266-9420</td>
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Area Agency on Aging Contact Info (MAPS contacts)

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<tbody>
<tr>
<td>DC Office on Aging</td>
<td>Rick� fontsize</td>
<td><a href="mailto:rick@email.org">rick@email.org</a></td>
<td>202-234-5026</td>
</tr>
<tr>
<td>DC Office on Aging</td>
<td>Rick� fontsize</td>
<td><a href="mailto:rick@email.org">rick@email.org</a></td>
<td>202-234-5026</td>
</tr>
</tbody>
</table>
The Senior Nutrition Program
Produced by Amanda Scotland

IMPACTS ON HEALTH
- Decreased Hospitalizations
- Less Medical Spending
- Improved Self-Reported Health
- Reduced Nursing Home Use
- Fewer Emergency Room Visits
- Improved Quality of Life

IMPACTS ON NUTRITION
- Improved Folic Acid Status
- Improved Diet Quality
- Decreased Nutritional Risk
- Increased Nutrient and Food Intake

IMPACTS ON SAFETY
- Decreased Falls
  - Those receiving home-delivered meals and snacks significantly fewer falls
- Increased Self-Report of Feeling Safer
  - Significant increase in feelings of safety for those receiving home-delivered meals

Other Benefits to Consider
- Participants are satisfied with meals and their overall experience
- Participants report less anxiety related to food
- The meal program helps accommodate those with functional impairments

SOCIAL IMPACTS
- Decreased Feelings of Loneliness
- Support Independent Living
- Increased Opportunities for Interaction and Engagement

References
2. Costs and impacts of a nutrition assistance program, University of Maryland, 2007.
3. The role of nutrition in the health and well-being of older adults, National Academy of Sciences, 2009.
4. The impact of nutrition assistance programs on the health and well-being of older adults, University of Maryland, 2010.
5. The effects of nutrition assistance programs on the health and well-being of older adults, University of Maryland, 2011.
You can access this infographic at: https://acl.gov/sites/default/files/programs/2019-03/MealProgramValueProposition.pdf
Appendix 10: Healthcare-Community Partnership Resources

- A Roadmap to Financial and Programmatic Sustainability for Community-Based Organizations: Understand the Business Environment and Your Place Within It
- Aging and Disability Business Institute
- Chronic Care Management Information Resource
- Community-Clinical Linkages for the Prevention and Control of Chronic Diseases. A Practitioner's Guide
- Fundamentals of Community-Based Managed Care: A Field Guide
- HCBS Business Acumen Center
- HCBS Business Acumen Toolkit.
  - Step 1: Prepare. Understand the Business Environment and Your Place Within It.
  - Step 2: Plan. Use Business Intelligence to Build the Strategic Plan for Your Organization
- Healthcare Policy and Practice Opportunities for Senior Nutrition Programs.
  - Part 2: Launching an In Home Medical Nutrition Therapy Program
- Health Care and Community-Based Organizations Have Finally Begun Partnering to Integrate Health and Long-Term Care
- Learn the Basics about Medicare Advantage and Position Your Organization for New Partnerships
- Partnerships for Health: Lessons for Bridging Community-Based Organizations and Healthcare Organizations
- Sustainability and Revenue Generation in an Evolving Senior Nutrition Business Environment
- The Aging Network in Transition: Hanging in the Balance
- Using Community Partnerships to Integrate Health and Social Services for High-Need, High-Cost Patients