



ADDRESSING MALNUTRITION IN OLDER ADULTS DURING CARE TRANSITION

CURRENT STATE OF ASSESSMENT

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NOVEMBER 2019

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INTRODUCTION

According to the United States Census Bureau in 2017, there were nearly 51 million adults aged 65 years and older living in the US, a 45% increase from 35 million in 2000.¹ Several factors give emphasis to the need to support healthy aging; the rapidly growing older adult population, their need for support systems, and rising health care costs are among pressures to older adult health, independence, and quality of life. Nutrition plays a vital role in successful aging.

Older adults are at risk for malnutrition due to physiological, psychosocial, and economic factors. Transition across care settings can intensify that risk. Should older adults wish to live in their own homes, services need to be coordinated to maintain or improve their health. Examples include the provision of community food and nutrition programs with a focus on ameliorating malnutrition and food insecurity², reducing avoidable hospital or long-term care admissions³, and better navigation during transitions of care. Early nutrition screening using validated tools, nutrition assessment, nutrition diagnosis and documentation, and interventions for older adults who are malnourished or at risk for malnutrition can prevent malnutrition, alleviate malnutrition, and support recovery during care transitions.⁴ Early interventions, often carrying minimal costs, can lessen or prevent a nutritional crisis.⁵ The causes of malnutrition are multiple and complex; the solutions will require collaboration among many organizations, government bodies, and communities. Major efforts are underway to include diagnosis and treatment of malnutrition as a component of high-quality health care. Key advocacy coalitions such as Defeat Malnutrition Today⁶ have developed many resources including the National Blueprint: Achieving Quality Malnutrition Care for Older Adults.⁷ It outlines specific goals and strategies to promote and achieve high-quality malnutrition care across the continuum of acute, post-acute, and community settings. Malnutrition Quality Improvement Initiative (MQii) provides a framework to guide acute care in improving malnutrition.⁸

This report reviews the literature describing factors that contribute to malnutrition in older adults in general, during hospitalization, and then during transition through care settings from acute care, long-term care, and home and community-based settings. Barriers and opportunities to address malnutrition in older adults during care transitions are discussed, especially the barriers and opportunities that are supported by on-the-ground practitioners. This report also provides the findings of practitioner surveys, and focus groups.

LITERATURE REVIEW

DEFINITION OF MALNUTRITION

Malnutrition in older adults is common and frequently unrecognized⁹, making it one of the most challenging health problems.⁵ Malnutrition is defined as a state of deficit, excess, or imbalance in protein, energy, or other nutrients that adversely affect an individual's body composition, function, and clinical outcomes. The imbalance occurs in both under-nutrition and over-nutrition.^{7, 10, 11} Definitions of malnutrition range from simple formulae such as degree of unintentional weight loss to complex calculations that include anthropometric measurements and biochemical measures. The Academy of Nutrition and Dietetics and the American Society for Parenteral and Enteral Nutrition (ASPEN) developed three categories of malnutrition to standardize the definition and diagnosing of malnutrition.^{9, 11}

- Starvation-related malnutrition
- Chronic disease-related malnutrition
- Acute disease or injury-related malnutrition

Each category of malnutrition has subcategories to identify the degree of malnutrition based on energy intake, amount of weight loss, percentage of muscle and body fat, presence of edema, and grip strength.^{9, 10, 11}

RISK FACTORS FOR DEVELOPING MALNUTRITION

Malnutrition is highest among older adults, especially those over the age of 85, and in low-income communities.¹² Older adults may be considered at risk for becoming malnourished if they have any of the following:

- Involuntary loss of 10% or more of usual body weight within 6 months, or involuntary loss of greater than or 5% or more of usual body weight within 1 month
- Involuntary loss or gain of 10 pounds within 6 months
- Body mass index less than 18.5 kg/m² or greater than 25 kg/m²
- Chronic disease
- Increased metabolic requirements
- Altered diets or diet schedules
- Inadequate nutrition intake, including not receiving food or nutrition products for greater than 7 days⁹

There are numerous factors commonly associated with aging that contribute to the risk of malnutrition. With age often comes loss of appetite, difficulties with chewing or swallowing, and use of multiple medications. Chronic illness, disease, injury, and hospitalizations also contribute and can lead to significant loss of muscle mass and functional disability. Chronic disease patients are often prescribed diet restrictions that may not always be necessary. Overly restrictive diets may be unacceptable or difficult to follow, having a negative impact on nutritional intake and contributing to malnutrition.¹²

A recent study found that in hospitalized patients, one in four orders for nothing by mouth (NPO) and nearly half of missed meals could have been avoided.¹³ Hospitalized older adults come into malnutrition risk because of the unnecessarily lengthy periods requiring patients to be NPO, frequent meal interruptions, and low acceptance of foods served¹⁴. A selected list of factors that can contribute to development of malnutrition are in Table 1.

Food security is one of the Social Determinants of Health (SDOH).¹⁵ The U.S. Department of Agriculture (USDA) defines food insecurity as “the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.”¹⁶ Limited finances can impact older people’s ability to purchase adequate food, which leads to food insecurity. Or older adults can be unable to access or prepare food due to lack of transportation or functional limitations.^{7, 12} Poverty and food insecurity significantly increase the risk of malnutrition. Food-insecure older adults eat fewer nutrients and are more likely to have poor health, higher health care costs, depression, and functional limitations that impact their independence.^{7, 17} Screening for food insecurity can be done using a two-question screening tool (see Table 2)¹⁷.

TABLE 1: CONTRIBUTORS TO MALNUTRITION¹²

- | | |
|---|---|
| • Chronic diseases | • Illness with inflammation, infection, or other catabolic conditions |
| • Polypharmacy | • Overly restrictive diets |
| • Trouble chewing and swallowing | • Sensory impairment |
| • Poor appetite/reduced nutrient intake | • NPO (“nothing by mouth”) status for tests or while hospitalized |
| • Gastrointestinal symptoms including constipation | • Poor functional status (such as inability to prepare food) |
| • Depression | • Altered mental status/dementia |
| • Living alone, social isolation, limited social supports | • Lack of transportation to access food |
| • Limited finances | • Food insecurity |
| • Being hospitalized | |

TABLE 2: HUNGER VITAL SIGN TWO QUESTION SCREENING TOOL

For each statement, please tell me whether the statement was “often true, sometimes true, or never true” for your household in the last 12 months:

1. We worried whether our food would run out before we got money to buy more.
2. The food we bought just didn’t last and we didn’t have money to get more.

The discovery that social and economic factors account for 40% of health determinants has led to the movement to assess the SDOH of older adults’. Hospitals and other service providers are reaching out and partnering with community providers to improve this population’s health as a way to reduce health care costs.

American Hospital Association recommendations include¹⁸:

- Screen for food insecurity
- Educate patients about available federal nutrition programs
- Connect patients and families with Registered Dietitian Nutritionists (RDNs) for counseling services
- Provide free food or healthy snacks at clinics or on-site food pantries

Screening for malnutrition can create an opportunity to connect older adults to needed community based resources. Sadly, not only do older adults often miss a connection to home and community-based services as they transition across care settings, they don't access these programs enough overall. In 2013, almost 60% of the older adults eligible for the Supplemental Nutrition Assistance Program (SNAP) did not participate. Similarly, home-delivered and congregate nutrition programs were either underutilized or not available to the people who needed them.⁷

An example of a malnutrition and food insecurity screening tool is provided in Appendix C.

EFFECT OF HOSPITALIZATION

Malnutrition in older adults can be exacerbated by hospitalization and transitions of care,³ with malnutrition rates found to be 30% to 50% in hospitalized patients aged 60 years or older.¹⁹ Those malnourished upon admission often become more nutritionally impoverished in the hospital, and among patients who are not malnourished upon admission, approximately 33% may become malnourished during the hospital stay.¹³

CONSEQUENCES OF MALNUTRITION

Malnutrition negatively impacts older adults' functionality and quality of life. For hospitalized older adults, malnutrition interferes with their ability to recover from an acute illness, surgery, or stressor.²⁰ They are at a higher risk for medical complications, longer hospital stays, nursing home admission, or readmission to the hospital. Addressing nutritional needs through transitions of care will make people less vulnerable to the negative consequences of malnutrition as a co-morbidity to other medical and life events.²¹

While hospitalized, many older adults lose muscle mass and strength due to inactivity. Prolonged periods of bed rest triggers a reduction the production of muscle protein in older adults.⁹ When discharged, their ability to perform activities of daily living such as cooking and shopping are diminished, negatively impacting nutritional intake. Changes in functional ability can also lead to social isolation which may cause depression and, in turn, affect cognitive functioning. These psychosocial changes can lead to a decreased nutritional intake.¹²

Up to fifty percent of older adults who are hospitalized may be malnourished, leading to health care costs that are 300% higher, a 1.5 higher likelihood of dying while in the hospital, a risk of dying within 90 days that is five times higher, readmission rates higher by 50%, and a length of stay 4–6 days longer than older adults who are not malnourished.^{11, 22, 23, 24}

Malnourished older adults also have more complications related to surgery. But early identification of malnutrition risk leads to early nutrition intervention and improved clinical outcomes.²⁵ Elective surgery presents a unique opportunity for nutrition intervention. Nutrition risk screening could be conducted with enough lead time to improve nutritional status before surgery. The nutritional improvement could then be sustained throughout hospitalization and transitions of care. In some cases, consideration to delay elective surgery until nutritional deficiencies are corrected has been suggested.^{26, 27}

DIAGNOSING MALNUTRITION ACROSS TRANSITIONS OF CARE

Screening for Malnutrition

Skipper and colleagues (2012) note that “Screening for nutrition problems is a Medicare Condition of Participation and therefore a requirement for accreditation or certification of US healthcare facilities.”²⁸ Nutrition screening identifies patients who may benefit from nutrition assessment and intervention by an RDN.²⁹

Malnutrition Screening in the Outpatient Setting

Nutrition risk screening should be done in physician offices.²⁹ For physician practices certified by the Joint Commission Morgensen and DiMaria-Ghalili (2015) recommend that: “Nutrition screening may be performed at the first visit for primary care, an ambulatory clinic, or office practice. Thereafter, the screens and assessment would be needed only as appropriate for the reason the patient is presenting for care or services.”⁴ As stated earlier, the opportunity exists to screen for malnutrition in the primary care setting prior to surgery, which is not routinely done at present.¹⁴ Early identification of malnutrition allows time to address nutritional deficiencies prior to surgery and facilitate better outcomes, shorter length of stay, and better quality of life.^{30, 31, 32} It is important to screen older adults who have had a change in condition such as a hospitalization, and again as they transition across care settings. This is because the diagnosis of malnutrition, risk of malnutrition, or the nutrition plan of care may not be included in the discharge summary.⁴

Malnutrition Screening in the Hospital Setting

The Joint Commission requires hospitals to screen and reassess patients to plan care, treatment, services, and discharge based on patients’ needs. For example, perform nutrition screening within 24 hours of admission and complete a full nutrition assessment if the screen identifies an at-risk patient. In addition, periodic rescreening must occur at regular intervals.³³ In the hospital, the initial nutrition screen is usually done by nurses and then an RDN completes the nutrition assessment on patients found to be at risk for malnutrition. The RDN documents the nutritional diagnosis for malnutrition and the physician or licensed independent practitioner documents this in the medical record. Even with its high prevalence, malnutrition is still under-diagnosed and insufficiently documented in medical records.^{20, 21}

It is important to identify both malnutrition and risk of malnutrition early in the hospital admission process so that it can be addressed with a plan of care during the hospital stay and after discharge. Readmission rates and complications are influenced by the care the older adult needs and receives when moving from one care setting to another or during transitional care. Almost 20% of Medicare patients discharged from a hospital require another hospitalization within 30 days.¹⁴

Diagnosing Malnutrition

Diagnosing, documenting, and treating malnutrition empowers caregivers to optimize quality of care, improve clinical outcomes, and reduce costs.¹¹ Documenting malnutrition in hospitalized patients is increasing the percentage of patients receiving the appropriate malnutrition diagnosis on their medical records. More RDNs are using the Academy/ASPEN Adult Nutrition Clinical Characteristics (see Table 3) which includes the Nutrition Focused Physical Exam (NFPE), among other metrics, for documenting malnutrition.¹⁰

TABLE 3: ADULT NUTRITION CLINICAL CHARACTERISTICS TO DOCUMENT DIAGNOSIS OF MALNUTRITION⁹

Malnutrition can be detected by two or more of the following six characteristics

1. Energy intake
2. Weight loss
3. Body fat
4. Muscle mass
5. Fluid accumulation
6. Reduced grip strength

Malnutrition and its negative consequences place a significant burden on the healthcare system and health care costs. With documentation of malnutrition, hospitals can capture appropriate reimbursement³⁴ from the insurance provider for the additional care provided. The RDN's nutrition assessment identifies malnutrition; the physician must document it in the medical record. It has been shown that when RDNs are able to place the malnutrition diagnosis on the inpatient electronic medical record (EMR) problem list, there was increased coding on the medical record at discharge.³⁵ For billing and research purposes, the diagnosis is translated into numerical codes known as International Classification of Disease, 10th Revision (ICD-10) codes. Table 4 compares examples of how malnutrition can be documented.

TABLE 4: EXAMPLES OF DOCUMENTING MALNUTRITION

Here is an example of the nutrition diagnosis written by the RDN³⁶

- Moderate protein-calorie malnutrition related to limited access to food as evidenced by weight loss and BMI less than 19

Medical diagnosis written by the licensed independent medical practitioner

- Moderate malnutrition or Moderate protein-calorie malnutrition

The ICD-10 Code indicating a diagnosis of protein-calorie malnutrition

- E44

The documentation and coding for malnutrition during hospitalization is essential information to share as a patient transitions to other care settings. Unfortunately, there are no malnutrition codes for ambulatory care settings,³ and that results in limited malnutrition screening and treatment. There may be payment for malnutrition care with private insurance companies, Patient Aligned Incentive Care for the Elderly (PACE), or Accountable Care Organization (ACO) programs.³⁷ Older adults with diabetes or renal disease and malnutrition as a co-morbidity can receive Medical Nutrition Therapy (MNT) provided by an RDN as a Medicare-covered service using ICD-10 and CPT codes for diabetes and renal disease. The combination of diabetes and malnutrition presents significant problems including higher health care costs and a risk of dying increased by 69%. Since 17.5% of older adults with diabetes are malnourished, screening and treating for malnutrition will have an impact on their longevity and health care costs.^{38, 39}

Transitions of Care

The nutritional care of older adults can be improved as they transition from the hospital across care settings to home. Food and nutrition services are often not coordinated between the hospital and home, so there is a need to ensure coordination of services for older adults.⁴ Providing quality nutrition care can support older adults in maximizing their health and independence and has been shown to reduce avoidable readmission by 28%.⁴⁰

Since nutrition status is often not evaluated, documented or discussed with patients as they transition from one care setting to another (see infographic Appendix B), patients often have higher risks for negative health outcomes related to malnutrition, including increased risk of chronic disease, frailty, falls, and loss of independence.⁴¹ Worsened health outcomes also result in increased health care services utilization, health care costs⁴² and higher readmission rates.⁴¹

Discharge from Hospital

With the increasingly older adult population, there are more adults utilizing the health care system with increased post-discharge needs. An older adult's nutrition status can worsen during a hospital stay; this may be missed if nutrition screening is done only at admission and not discharge. The decline in nutritional status can contribute to the increased likelihood they will be discharged to long-term care.⁴

Hospitals need to provide malnutrition information in discharge summaries or documents as the patient transitions to other care settings. The Medicare Conditions of Participation requirement for discharge planning (482.43 - Condition of participation: Discharge planning.) include (d) Standard: Transfer or referral.⁴³ The hospital must transfer or refer patients, along with necessary medical information, to appropriate facilities, agencies, or outpatient services, as needed, for follow-up or ancillary care.

Hospitals have a financial incentive to improve those transitions of care processes that reduce readmission to the hospital: hospitals receive reduced reimbursement when readmission rates are higher than the national average.⁴⁴ Nutritional care of malnourished older adults in transition of care reduces readmission rates and thereby supports hospitals financially.⁴⁵ Some hospitals are providing continued nutrition services to at-risk older adults after discharge by providing meals or fresh foods, in recognition of the role of nutrition in the overall health of older adults and as a preventive strategy to reduce health care costs and hospital readmissions.⁴

TRANSITION TO LONG-TERM CARE

Older adults have increased needs following a hospitalization, so they are more likely to be discharged to long-term care for short-term rehabilitative or restorative care.⁴ Approximately 40% of hospital patients over the age of 85 are discharged to a long-term care facility.¹⁴

Documentation of nutrition assessment, malnutrition diagnosis with an ICD-10 code, nutrition plan of care, and nutrition progress notes at discharge benefit continuity of care as the patient transitions from a hospital to the long-term care facility. Additionally, the active malnutrition diagnosis based on the ICD-10 code is beneficial to the facility for payment purposes. Malnutrition is considered a co-morbidity under the Patient Driven Payment Model (PDPM) and can thus increase reimbursement. The Centers for Medicare & Medicaid Services (CMS) revised the Skilled Nursing Facility (SNF) Prospective Payment System (PPS) for classifying SNF patients in a covered Medicare Part A stay. Beginning October 1, 2019 payment is based on the patient's co-morbidity score.⁴⁶

The 2014 Improving Medicare Post-Acute Care Transformation Act (known as IMPACT Act of 2014) was enacted to facilitate coordinated care and improve Medicare beneficiary outcomes. The IMPACT Act requires post-acute care assessment data to be standardized for quality, payment, and discharge planning. It includes home health agencies, skilled nursing facilities, long-term acute care hospitals, and inpatient rehabilitation facilities. The Act also requires hospitals and Post-Acute and Long-Term Care (PALTC) providers to provide quality measures to consumers when transitioning to a post-acute care provider.⁴⁷ The goal of the Act is to reform post-acute care payment and reimbursement, while ensuring continued beneficiary access to the most appropriate setting for care.⁴⁸

Discharge planning is a key component in coordination of care; it is a process for deciding what older adults need as they transition from one care setting to another. The process of discharge planning in long-term care facilities involves an interdisciplinary team including nutrition professionals to address nutritional needs consistent with nutrition status and medical condition. RDNs coordinate with home and community food and nutrition services such as senior services, SNAP or food assistance programs, fresh food pharmacies, food pantries, and congregate or home-delivered meals to support the client's/resident's needs for those able to transition back to their homes.⁴⁸

Communication between the hospital and long-term care team is critical during this transition. To support that communication, discharge documents need to include a nutrition assessment, nutrition plan of care, and nutrition recommendations for the next care setting. For those discharged to home, discharge planning needs to include the nutrition information in the discharge summary along with practical recommendations so that change is actually implemented.¹⁴ Having easy access to nutritious food such as home-delivered meals is important for surgery or illness recovery. Home-delivered meals have been shown to improve nutritional status,⁴⁹ but sometimes discharge planners and older patients are not aware of the programs, and in some areas the services are under-funded, creating a waiting list for services such as home-delivered meals.¹⁴

TRANSITION TO HOME

An example of an all too familiar situation facing vulnerable older adults seeking needed services to support their nutrition needs was summarized by authors Morgensen and DiMaria-Ghalili (2015): “An 81-year-old Fayetteville, North Carolina, man who lives alone called 911 operators asking for food after being discharged home from the hospital and rehabilitation center for treatment of cancer. Weighing only 115 pounds and unable to ‘get out of his chair,’ he reported being hungry and had returned home to an empty refrigerator. He requested some food items to hold him over until his home care visits started. This story exemplifies the risk factors for malnutrition in older adults including the psychosocial, functional, and economic risk factors, as well as the traditional physiological risk factors related to acute and chronic diseases. More importantly, this real-life story underscores the importance of proper food and nutrition during care transitions.”⁴

This real-life case study underscores the gap that often exists between the hospital and community-based food and nutrition programs, resulting in many older adults who are in need of food assistance after hospital discharge but do not receive it.¹⁴ A multidisciplinary approach to nutrition in transitional care is needed, beginning with an additional nutrition screening prior to discharge. The discharge screening and discharge planning should include assessment of a patient's ability to adequately and appropriately nourish themselves if they are discharged to home.⁴⁵

Older patients who transition from hospital to home are particularly at risk for decline in nutritional status. Many of these patients have multiple health problems that continue beyond discharge. They often experience symptoms such as fatigue, memory problems, malnutrition, reduced ability to perform activities of daily living, and muscle weakness, all of which make them more prone to poor outcomes and readmission in the first weeks after hospital discharge.⁴⁴ Primary care providers need to monitor nutrition status in order to support the older adult living at home.⁴

Re-hospitalization rates for older adults are high and one-quarter to one-third of these re-hospitalizations are believed to be preventable. Communication problems between providers and across health care agencies, inadequate patient education, poor continuity of care, and limited access to services add up to a revolving hospital door. The opposites of these deficits (comprehensive individualized discharge planning, providing connections with community-based services, and follow-up care within the first few days of discharge to home) have been shown to reduce hospital readmissions.^{6, 14, 44, 50, 51}

Beginning in 2020, Medicare Advantage plans will have the ability to offer a “non-primarily health related” item or service to chronically ill enrollees if the service has a reasonable expectation of improving or maintaining the health or overall function of the chronically ill enrollee.⁵² This will be a new opportunity for providing food and meals to older adults in their home. The nutrition-related services include⁵²:



- Meals (beyond limited basis): Existing guidance in Chapter 4 of the Medicare Managed Care Manual provides that meals are a primarily health related benefit (Plan Benefit Package (PBP) category B13c) in three limited situations: when provided to enrollees for a limited period immediately following surgery, or an inpatient hospitalization, or for a limited period due to a chronic illness. In those situations, a meals supplemental benefit is permissible if the meals are: 1) needed due to an illness; 2) consistent with established medical treatment of the illness; and 3) offered for a short duration. Meals may be offered beyond a limited basis as a non-primarily health related benefit to chronically ill enrollees. Meals may be home-delivered and/or offered in a congregate setting.
- Food and Produce: Food and produce to assist chronically ill enrollees in meeting nutritional needs may be covered. Plans may include items such as (but not limited to) produce, frozen foods, and canned goods.

Another opportunity is being developed with potential for the provision of malnutrition care to older adults in home care setting. The “Independence at Home” CMS demonstration is showing improved health outcomes and reduced Medicare expenditures for chronically ill patients in the home setting. The demonstration was designed to test whether home-based care can reduce the need for hospitalization, improve patient and caregiver satisfaction, lead to better health for beneficiaries, and lower costs to Medicare. Care is provided by “a physician, nurse practitioner, or physician assistant or group of such practitioners that furnishes care as part of a team that may include physicians, nurses, physician assistants, pharmacists, licensed mental health practitioners, and other health and social services staff, as appropriate.” The other staff could include RDNs.⁵³

BARRIERS TO COORDINATED MALNUTRITION CARE TRANSITIONS

To better understand the barriers limiting delivery of high-quality care for older adults who are malnourished or at risk of malnutrition and transitioning across care settings, and to identify action plans to address these challenges, Avalere Health, the Academy of Nutrition and Dietetics, and the Defeat Malnutrition Today coalition convened a national dialogue event, “Advancing Patient-Centered Malnutrition Care Transitions.”⁵⁴ Here are some of their findings:



Screening and Nutrition Care

1. Lack of patient education on impact of proper/good nutrition on disease management, recovery, and health outcomes.
2. Perceived stigma or “blame” attached to term “malnutrition” during patient and family engagement.

Patient Education and Shared Decision Making

1. Nutrition risk identification and care are not integrated into existing care transition pathways and accountable care models.
2. Challenges to effective screening (e.g., forgetting to screen, lack of training to screen, lack of time during the office visit).
3. Insufficient hours for physician training on nutrition during medical school, and insufficient clinician knowledge of how to access and make use of other clinical and community-based support services and partners (e.g., dietitians, social workers) to address patients’ malnutrition needs.
4. Lack of coverage for nutrition assessment, education, counseling, and treatment.

Data Infrastructure

1. Lack of widespread adoption of standardized malnutrition terminology and clinical standards across care settings to support data transfer.
2. Lack of published, high-quality data demonstrating the impact of good nutrition on patients’ outcomes in the post-acute and community settings.

IMPROVING TRANSITIONAL CARE

The 2018 National Dialogue event provided recommendations to improve transitions of care. The following information illustrates some of the “Dialogue Proceedings” recommendations and includes an infographic highlighting the recommendations.⁵⁴

Figure 1. Better Integration of Malnutrition Care into Care Transitions is Necessary Infographic⁵⁴

Used with permission by Defeat Malnutrition Today Coalition.

Better Integration of Malnutrition Care into Care Transitions Is Necessary /

Nutrition Health of US Population

Malnutrition, defined as a nutrition imbalance including under-nutrition and over-nutrition, is a pervasive, but often under-diagnosed, condition in the United States. This prevalence is exacerbated among those who are already ill: chronic diseases such as diabetes, cancer, and gastrointestinal, pulmonary, heart, and chronic kidney disease and their treatments can result in changes in nutrient intake and ability to use nutrients, which can lead to malnutrition.

Malnutrition Prevalence Across Care Settings



Acute Care¹
20–50%



Post-Acute Care²
14–51%



Community Care^{3,4}
6–30%

More than 40% of patients age 50+ are not getting the right amount of protein each day⁵

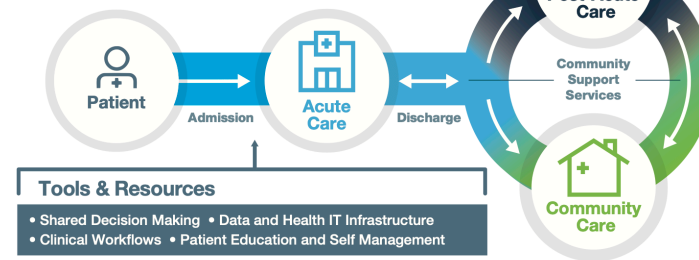
70% of adults are overweight or have obesity⁶

Existing Patient Care Transitions Pathway

Too often, as patients transition from one point of care to another, their nutrition status is not evaluated, documented, or even included in patient health conversations. Lack of evaluation and management can result in negative health and financial outcomes as malnourished adults have been found to utilize more health services with more visits to physicians, hospitals, and emergency rooms.

Determinants of Patient Experience and Outcomes Across Settings of Care

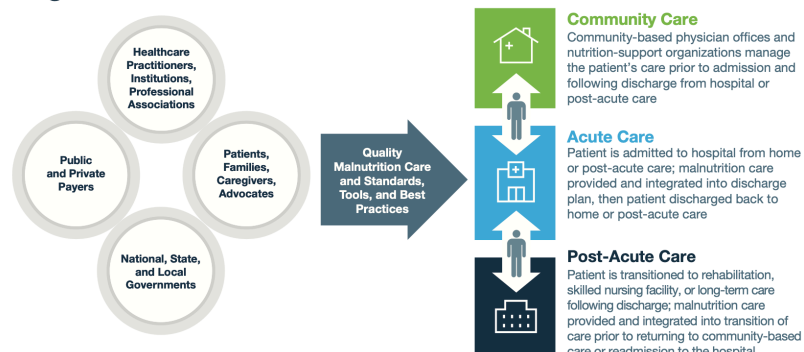
- Social Determinants of Health
- Disease and Chronic Conditions
- Incentives
- Population Health Management



KEY TAKEAWAY: Nutrition Status Is Missing

Recommendations to Integrate Malnutrition Care into Care Transitions

In March 2018, a multi-stakeholder group of health and community leaders and advocates came together in a national Dialogue, “Advancing Patient-Centered Malnutrition Care Transitions,” to focus on developing real-world solutions to better integrate nutrition risk identification and care into existing care transition pathways and accountable care models.



US Economic Burden of Disease-Associated Malnutrition Is Estimated to be \$157 Billion Annually

¹ Barker LA, Gout BS, Crowe TC. Hospital malnutrition: Prevalence, identification, and impact on patients and the healthcare system. *Int J Environ Res Public Health*. 2011;8:514–527.

² National Resource Center on Nutrition Physical Activity and Aging. Malnutrition and Older Americans.

³ Guigoz Y. The Mini Nutritional Assessment (MNA) review of the literature—What does it tell us? *J Nutr Health Aging*. 2006;10:466–487.

⁴ Snider JT, Linthicum MT, Wu Y, et al. Economic burden of community-based disease-associated malnutrition in the United States. *JPEN J Parenter Enteral Nutr*. 2014;38(2 Suppl):775–85S.

⁵ Estimated (Age-Adjusted) Percentage of US Adults with Overweight and Obesity by Sex. 2013–2014 NHANES data.

⁶ NHANES data from 2007–2008.

Recommendations to Advance Malnutrition Care as Patients Transition Across Care Settings /





Clinicians, community and social service providers, patients and caregivers, payers, and policymakers can take action to address care gaps using key recommendations identified during the Dialogue. By partnering to (1) support systematic nutrition screening and care, (2) provide better education and shared decision making, and (3) improve data infrastructure to capture and share critical nutrition information, stakeholders can facilitate enhanced care coordination and better outcomes for patients across care settings.









Screening & Nutritional Care

-   Integrate nutrition status considerations into existing protocols, pathways, and models (e.g., disease-specific protocols and pathways, transitional care models)
-   Adopt and disseminate existing guidelines and protocols that recommend actions for optimal nutrition care (i.e., population health)
-   Implement systematic screening in post-acute and community settings using existing standardized malnutrition screening tools (Appendix 4)
-   Align incentives (e.g., policy and financial) with malnutrition care delivery beyond the hospital (i.e., community setting) to improve prevention, identification, and management
-   Engage and empower community-based clinicians and providers (e.g., retail pharmacists, home health workers, social workers, meal delivery organizations‡, behavioral health counselors) to help patients achieve nutrition goals
-   Educate clinicians and social service providers about the impact of malnutrition/poor nutrition, their role in identifying it (including when and how to screen for malnutrition, as well as available tools and interventions such as medical nutrition therapy), and the importance of nutrition interventions
-   Educate payers on the impact of poor nutrition/malnutrition on patient outcomes and healthcare costs and the value of nutrition care coverage

Patient Education & Shared Decision Making

-   Expand the use of shared decision making and education tools and create new tools as needed to engage patients/families/caregivers in discussions about nutrition care and better inform clinicians in clinical and community settings on nutrition information
-   Deliver information to patients/families/ caregivers in a way that is sensitive to their understanding of malnutrition, culture, and health literacy

-   Educate patients/families/caregivers on how to discuss nutrition goals with patients' doctors and care providers
-   Educate patients/families/caregivers on how to support nutrition-related needs (e.g., preparing meals, coordinating food with medication management, providing oral nutrition supplements, changing tube feeding)
-   Partner with community-based organizations (e.g., Area Agencies on Aging and other providers) to raise broader population understanding of malnutrition and its impacts on patient health

Data Infrastructure

-   Adopt standardized malnutrition terminology and clinical standards in electronic health records (EHRs) to improve malnutrition risk identification and data transfer across care settings
-   Generate evidence and publish data reflecting the impact of nutrition status on clinically relevant outcomes in post-acute and community settings (e.g., admissions/readmissions, activities of daily living, quality of life)
-   Expand the use of tools (e.g., alerts, hard stops) and visibility of nutrition information in EHRs to enhance nutrition-related decisions and communicate nutrition information to relevant clinicians
-   Conduct informatics skill training for dietitians and other healthcare professionals supporting patients' nutrition needs
-   Identify mechanisms to share relevant social determinant-related data with clinicians and providers in a manner that is compliant with regulatory requirements and supports patient/family/caregivers' ability to maintain/improve patients' nutrition status
-   Create and adopt new technologies focused on malnutrition prevention and intervention (e.g., apps, wearables)

* This category encompasses clinical associations, clinical member organizations, social workers, mental healthcare providers, and other clinical/community and social service providers.

† This category encompasses patients and caregivers, as well as representatives of patients (e.g., patient advocacy groups, Patient and Family Advisory Councils).

‡ Meal delivery includes home-delivered as well as congregate meals.



Support for the Dialogue was provided by Abbott



July 2018

 Read the full Dialogue Proceedings publication here: <https://avale.re/2Lk7LkO>

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Examples for Improving Care Transitions

The Dialogue Proceedings: Advancing Patient-Centered Malnutrition Care Transitions⁵⁴ provide examples for implementing recommendations in hospital discharge processes, primary care pathway and payer care coordination model, using community-based resources.

Example 1 shows how the dietitians at one hospital are working with an interdisciplinary team to better incorporate malnutrition care into patient care transitions through improved patient engagement, data sharing across care delivery settings, and the use of case management. They accessed community resources to connect patients with nutrition-support services (such as meals, food assistance).

Example 2 demonstrates how a primary care physician office is working to better identify and manage patients at risk of malnutrition through improved clinician training, patient education, referral to dietitians as needed, and the use of technology to identify patients prior to arrival, support patients while at the clinician's office, and continue that support once patients leave it.

Example 3 highlights opportunities for engagement by non-clinical entities. It demonstrates how a payer and a community-based service provider have partnered to conduct a pilot program among high-risk community-dwelling individuals using volunteers, care coordinators, and technology. In this program, they rapidly identify potential medical or social concerns that could put an individual at risk of malnutrition and other health problems. The payer identifies high-risk patients who require meal delivery and would benefit from direct observation and monitoring for care coordination needs. Nutrition care plan is documented and sent to an outpatient clinic for the next-in-line provider.⁵⁴

Many of the barriers and recommendations identified in the Dialogue Proceedings are also mentioned by RDNs who participated in surveys and focus groups associated with this report. The findings of the surveys and focus groups are provided in the latter part of this document.

INITIATIVES TO ADDRESS MALNUTRITION IN OLDER ADULTS

Malnutrition Quality Improvement Initiative especially the barriers

The Academy of Nutrition and Dietetics, Avalere Health, and other stakeholders developed the Malnutrition Quality Improvement Initiative (MQii), a comprehensive framework designed to help hospitals improve nutrition care and outcomes for adult patients who are malnourished or at risk for malnutrition.⁵⁵

The framework includes recommendations to improve nutrition care during transitions of care. The following are some examples:

Discharge-Planning Best Practices⁵⁶

1. Create a designated space for nutrition information in the discharge-planning template.
2. Tailor discharge nutrition orders to each individual patient's needs and obtain input from all members of the care team.
 - Include take-home information such as malnutrition education and malnutrition care plan instructions that are in the patient's preferred language.
 - Provide information, directed to the patient and/or family caregiver, about best practices for self-management and links to community services such as home-delivered meals and Area Agency on Aging.

- Include a specific plan (such as specific appointment times for follow-up visits with the clinical care team) for monitoring and evaluating the patient's progress, so that the patient's malnutrition care plan can be adjusted as necessary.
 - Encourage patients to continue to work with their dietitian. Offer information to help facilitate this relationship (for example, ensure patients have appropriate contact information).
3. Leverage EHR (when possible) to prepare discharge plans and coordinate care post-hospitalization.
 - Include the inpatient malnutrition diagnosis and nutrition intervention plan in the discharge summary. If possible, via EHR linking, allow for auto-population of diagnosis into the discharge plan.
 - Create a template in the discharge summary so that the patient's diet plan is included in the diet section of the summary.
 4. Ensure appropriate policies and procedures are in place for those patients who lack a support system outside of the hospital, so that discharge planning includes malnutrition-related education and specific instruction in an effective and efficient way.⁵⁶

Best Practices for Diagnosing Malnutrition

1. The diagnosis should be made by a qualified dietitian or clinician on the care team (qualifications will vary according to state regulations for order-writing privileges).
2. The diagnosis should be clear, concise, utilize a standardized set of codes, and take into account the unique needs of the patient.
3. The clinician should clearly state the problem, etiology, and signs & symptoms.
4. The diagnosis should be recorded in the patient medical record and the "problem list."
5. Hospitals should grant dietitians ordering privileges to facilitate efficient and timely diagnosis, pending accordance with state law. (Note: Dietitian's orders may require a physician co-sign.)
6. If the RDN making the diagnosis does not have order-writing privileges, that RDN must communicate the diagnosis to the attending physician and agree on a treatment plan process.

Engage Networks of Key Stakeholders: Defeat Malnutrition Today Coalition⁶

The Defeat Malnutrition Today coalition is a diverse alliance of over 55 national, state, and local stakeholders and organizations, and it includes community, healthy aging, nutrition, advocacy, healthcare professional, faith-based, and private sector groups. The coalition shares one goal: recognition of malnutrition as a key indicator and vital sign of older adult health. Defeat Malnutrition Today works to create policy change toward a greater emphasis on screening, detecting, diagnosing, treating, and preventing malnutrition.⁷

The Defeat Malnutrition Today National Blueprint: Achieving Quality Malnutrition Care for Older Adults⁷ report contains strategies and recommendations to advance malnutrition care and services. Many of these recommendations can effectively mitigate malnutrition in older adults during care transitions and provide a connection with community-based food and nutrition programs. The following are a few examples from the Blueprint.

Ensure High-Quality Transitions of Care (TOC)⁷

- Establish evidence-based best practices for TOC specific to patient risk factors and clinical conditions. Ensure available resources so that care transitions don't allow malnutrition to fall through the gaps.
- Collaborate with acute care and post-acute care providers: what protocol or care pathway will directly link malnutrition patient data and discharge plans to the post-acute care setting?
- Expand the education of post-acute care providers on the importance of malnutrition care during care transitions, potentially working through non-governmental organizations such as the National Post-Acute Care Continuum (NPACC) and specialty organizations such as the American Hospital Association.
- Identify resource and infrastructure needs to support demand for home-delivered meals and other nutrition services for at-risk and malnourished older adults transitioning from post-acute care settings back into their community or home setting. Explore collaborations with AAAs and other organizations providing community-based services and supports to older adults (such as Meals on Wheels affiliates).

Train Healthcare Providers, Social Services, and Administrators on Quality Malnutrition Care⁷

- Raise awareness among community interdisciplinary care teams, and establish competencies in malnutrition prevention and management for community and home-based care professionals through licensure programs, training, credentialing, and certification programs.

Educate Older Adults and Caregivers on Malnutrition Impact, Prevention, Treatment, and Available Resources⁷

- Inform older adults and caregivers of community resources to access malnutrition care and nutrition services like Older Americans Act Nutrition Programs, SNAP, Commodity Supplemental Food Program, and other USDA food assistance programs, home care and meal-delivery services, and Aging and Disability Resource Centers (ADRCs).

Integrate Malnutrition Care Goals in National, State, and Local Population Health Management Strategies⁷

- Include nutrition screening questions in CMS annual wellness and Welcome to Medicare exams.

Increase Access to Community Food and Nutrition Programs

Access can be improved to community food and nutrition programs including congregate and home-delivered meals, SNAP, food pantries and nutrition counseling with an RDN. (3) Food and nutrition programs supported by the Older Americans Act are intended to reduce food insecurity, hunger, nutrition risk and/or malnutrition; promote socialization, health and well-being; and delay adverse health conditions.⁵⁷

It is no surprise that access to meal programs addressing the specific medical needs of the older adult has been shown to be most beneficial. Participation in a medically tailored meals program appears to be associated with fewer hospital and skilled nursing admissions and less overall medical spending.⁵⁸

The changes in CMS payment system, from fee for service to a quality of care program, create an environment for improving coordination of care and connecting older adults to community and home-based services, which should support older adults living in the community and reduce health care costs. Food and nutrition practitioners can collaborate with health care systems to streamline transitions of care to improve access to community food and nutrition programs³ as older adults transition from a hospital or long-term care setting back to their home. Nutrition services provide an important link to other supportive

in-home and community-based benefits such as homemaker and home health aide services, transportation, physical activity programs, chronic disease self-management programs, home repair and modification services, and fall-prevention programs.⁵⁷

First, however, older adults must be persuaded to accept the meals. Work by Dr. Sarah Francis has identified motivations that influence participants to use home-delivered meal programs.⁵⁹ Key motivators include convenience, cost, number of new reference choices, quality of menu options, nutritionist or dietitian involvement, and positive testimonies from others who have used the program. These findings will assist home-delivered meal programs in modifying programs to appeal to the older adults who will benefit by participating.⁵⁹

THE ROLE OF THE RDN: STANDARDS OF PRACTICE AND STANDARDS OF PROFESSIONAL PERFORMANCE

RDNs work under a framework of professional standards to provide safe, timely, patient/client/customer-centered, quality nutrition care. The Standards of Practice (SOP) in Nutrition Care and Standards of Professional Performance (SOPP)⁴⁸ serve as blueprints guiding the professional practices of RDNs and provide a foundation for public and professional accountability in nutrition and dietetics care and services.

The SOP reflect the Nutrition Care Process and workflow as a method to manage nutrition care activities with patients/clients. This Process includes nutrition screening, nutrition assessment, nutrition diagnosis, nutrition intervention/plan of care, nutrition monitoring and evaluation, and finally discharge planning and transitions of care. The SOPP consist of six domains of professional performance: Quality in Practice, Competence and Accountability, Provision of Services, Application of Research, Communication and Application of Knowledge, and Utilization and Management of Resources.⁴⁸

There are several areas within the SOP and SOPP that support the RDN's role in addressing malnutrition care in older adults and making system changes as needed to support quality outcomes during transitions of care. Here is a brief example for the application of some of the standards.

One of the problems identified in the literature and by the focus groups from this project is insufficient or entirely lacking nutrition information provided in transitions of care. Addressing this problem through a quality management process, the RDN in collaboration with the multidisciplinary team would recognize and identify system errors, establish goals, collect data, identify trends, and develop and implement strategies to eliminate the problem. The RDN would develop or contribute to the design and maintenance of policies and procedures, using the SOP and SOPP as professional guidelines, to ensure the necessary nutrition information is provided.

TELLING THE STORY: A NATIONAL SURVEY OF SELECT REGISTERED DIETITIAN NUTRITIONISTS EMPLOYED ACROSS THE CONTINUUM OF CARE

In order to better understand the nutritional care of older adults during care transitions, an online survey was distributed to RDNs via a member-only electronic mailing list (EML) during April and May 2019. The survey consisted of ten questions designed to identify and document practice models and promising practices from around the country that exemplify innovative and effective approaches to addressing malnutrition in older adults. There were questions regarding older adults in health care settings and across transitions of care, from acute care to community-based care settings. Members of three Academy

of Nutrition and Dietetics dietetic practice groups (DPGs) were invited through their DPG EMLs to participate in a brief online survey. The DPGs ran under the names Clinical Nutrition Managers, Dietetics in Health Care Communities, and Healthy Aging; 59 members responded. To see a summary of the survey conducted, see Appendix D.

Survey respondents worked in hospitals; outpatient settings; long-term care, rehabilitation, and skilled facilities; home care; continuing care communities or community programs including congregate and home-delivered programs. Most respondents were from urban settings. Some of respondents worked in Veterans Administration (VA) programs, PACE or ACOs. These systems have unique supports for maximizing nutritional care of the malnourished older adult through transitions of care.

Summary of Survey

The survey confirmed many of the barriers in the transition of care that have been identified in the literature review. There are significant issues with sharing nutrition information as older adults transition from one care setting to another. This is illustrated with a long-term care survey response to “Describe the nutrition care information provided from the previous program or service”: “Not much nutrition information is received.” Other respondents mentioned challenges with accessing medical records related to use of different EMR systems; RDNs not being able to see nutrition notes on medical records; nutrition notes not always on the discharge summary; and hospital RDN notes getting lost in the volume of discharge papers that are sent to the next care setting.

The type of screening tools varied, ranging from validated tools to individually developed tools. Participants in all care settings cited lack of RDN time as a barrier to malnutrition assessment.

Lack of payment sources to address treatment of malnutrition in the outpatient setting is a barrier. Another is patient acceptance of community food and nutrition programs, with one respondent stating: “We do run into the problem of patients or caregivers who don’t want to depend on others to help provide a service, who feel they can do a better job themselves, who don’t like the food, or feel they can’t afford the service. Plus, some don’t live near a congregate dining site.”

Survey participants implemented numerous best practices. One hospital-based respondent said “We have an active program to identify and document malnutrition in our hospitalized patients. RDNs complete a NFPE and communicate in the EMR to practitioner.” Others discussed including food insecurity screening in the emergency department. They had developed resources to provide information on home-delivered, congregate meals, or other meal options; information on SNAP and food assistance programs; and home and community-based services.

Survey respondents had these recommendations to support inclusion of community nutrition resources in discharge planning: use brochures with resources, increase RDN participation in discharge planning, help the older adult sign up for meal programs, educate discharge planners about community nutrition resources. These examples are illustrated by one respondent’s comment, “I created a food/nutrition community resource handout for patients. I’ve given those to the emergency department and the inpatient case managers to offer to patients. I also provide it to the common areas of the hospital for visitors to see. We include SNAP brochures in the emergency department and common areas as well. Ideally the food security screen would lead to the intervention of providing these resources to patients.” Another survey respondent’s recommendation for making community nutrition programs more a part of discharge planning was to “have representation from these programs on committees within the hospital and outpatient settings

to improve collaboration and communication among caregivers to help identify patients that would benefit from their service. If not already done, include in documentation templates to help caregivers.”

These survey findings provide meaningful insight into the barriers and opportunities for addressing malnutrition in older adults during care transitions. Many of the themes from this survey are supported by the literature review and found in the focus group report that is provided in this document.

TELLING THE STORY: INSIGHTS FROM KEY INFORMANT FOCUS GROUPS OF SELECT REGISTERED DIETITIAN NUTRITIONISTS EMPLOYED ACROSS THE CONTINUUM OF CARE

Background

The American Health Rankings Senior 2019 report notes that “Malnutrition has been defined as an imbalance including under-nutrition and over-nutrition; it is a pervasive, but often under-diagnosed, condition in the United States.”¹ According to Mary Russell, MS RDN LDN, FAND, 2018 Academy of Nutrition and Dietetics President, “Malnutrition is one of the most challenging health problems facing our country and the world.”² Malnutrition has long been recognized as a significant threat to successful aging. Older adults who are malnourished and need to be hospitalized have more problems, longer length of stays, and increased risk of dying.³

At discharge, when older adults needing additional care are transitioned from the hospital to other care settings such as skilled care, long-term care, or home care, their nutrition status is often not assessed, documented, or included in conversations with the older adult or caregivers.¹ Two national projects, Malnutrition Quality Improvement Initiative (MQii)⁵⁶ and Defeat Malnutrition Today (6) provide valuable resources for addressing malnutrition, including in care transitions. Acute care hospitals need to develop relationships with home-delivered meal or MOW programs that improve nutritional status among older adults and result in reduced non-elective nutrition-related health care use.

The purpose of the focus group was to determine factors impacting nutritional care of older adults in care transitions from the hospital, to long-term care and then to home.

The objectives are to:

- Describe current practices for identifying malnutrition.
- Gain a better understanding of the historical nutrition information available for newly admitted older adults.
- Identify the process for communicating nutrition assessment and plan of care through the discharge process.
- Discuss barriers for communicating nutrition information in transitions of care.
- Identify recommendations for improving the transitions of care process.
- Determine ways to make community nutrition programs more a part of discharge planning.

The long-term goal is to use the information gathered to develop systems for maximizing the care of older adults at risk for or already malnourished as they transition across care settings.

Methods

Recruitment

Recruitment targeted RDNs and discharge planners from hospitals, plus dietitians working in outpatient clinics, long-term care facilities, home care agencies and state units on aging (SUA), area agencies on aging (AAA), and senior nutrition programs. An invitation to participate in a focus group was posted on three of the Academy of Nutrition and Dietetics Dietetic Practice Groups (DPGs) national email distribution lists, namely the Clinical Nutrition Managers, Healthy Aging, and Dietetics in Health Care Communities lists. Volunteers were from a variety of states and represent diverse practices and settings such as hospitals (independent, part of a health care system, ACO, or PACE program); long-term care facility (independent, corporation, VA; dietitians full-time, and part-time consultants); and home care (VA, PACE program, and part of a hospital system). Hospital dietitians were asked to recruit a discharge planner to join them in the focus group conference call.

Focus Group Procedures

Focus groups were conducted via conference calls during April and May, 2019. There were three hospital groups (n=15); 2 long-term care groups (n=7); 3 groups of SUA/AAA/senior nutrition programs (n=11); and three home care groups (n=6) for a total of 39 participants. All participants were provided the discussion questions addressing nutritional care of older adults during care transition, prior to the conference call. During the call they were asked the same set of open-ended questions. Focus groups were facilitated by Ms. Russell, MS, RDN, LDN, FADA, Consultant, and audio-recorded. Focus group discussions were transcribed and analyzed for themes using standard focus group protocol⁶⁰ by Dr. Sarah Francis' Iowa State University research team (5 members).

Focus Group Themes

1. Nutrition information available from prior settings

All practice settings indicated nutrition information was seldom available for older adults being admitted to their care setting. Another barrier to sharing nutrition information during transitions is related to electronic medical record (EMR) systems.

2. Improving malnutrition screening of older adults

One common recommendation from all focus groups was to improve screening older adults for malnutrition: providing training on the use of screening tools and the importance of nutritional screening. RDNs in hospitals and ambulatory settings mentioned that training would improve the timing and accuracy of the screening. Focus group participants identified a need for standardized and validated nutrition screening and assessment tools.

3. Improving the transitions of care

Communication challenges were one of the main themes identified. This includes communications between EMR systems, between care providers, and gaps such as incomplete patient information. Improving transitional care includes having discharge documents containing include nutrition screening and assessment questions, nutrition progress notes, increased awareness about community nutrition programs, practical at-home nutrition recommendations and RDN contact information.

4. Integrating community-based senior nutrition programs, food assistance programs or nutrition counseling by a dietitian as part of standard discharge planning

Several general themes emerged from hospital dietitians and discharge planners including: increased awareness of malnutrition and benefits of community-based food and nutrition services; investment in marketing campaigns to reduce stigma among aging adults related to these services and programs, and promotion of the importance of the RDNs in community nutrition programs working with adults who are malnourished or at risk of it.

Limitations

The ability to generalize these findings is limited by the small sample size and by questionable diversity in the focus group participants. Participants were primarily dietitians working in hospitals, home care, long-term care, and community-based nutrition programs. They volunteered to participate in response to an announcement on the Academy of Nutrition and Dietetics Practice Group email distribution lists. Focus group research additionally opens the opportunity for social bias and collective voice.

Conclusion

These findings provide a view of the current state of nutrition care and communication of that care as older adult's transition from one care setting to another care setting. Based on the focus group discussions, the following opportunities to improve nutritional care for older adults who are risk for or are malnourished were identified:

Opportunities to Improve Nutritional Care

Promote Community Programs and Make Referrals to Programs

- Promote awareness of community food and nutrition programs
- Increase advocacy and marketing efforts such as a malnutrition tool-kit with resources that promote community food and nutrition programs among care providers, discharge planners, and older adults
- Establish standardized referral systems with health care providers and health care systems for community food and nutrition services for older adults who are at risk for malnutrition or who are malnourished
- Work with legislators, insurers, community officials, and community champions to establish and fund standardized referral systems to provide community-based nutrition services to older adults who are malnourished or at risk for malnutrition

Document Outcomes

- Document outcomes associated with nutrition interventions based on data collected using validated nutrition risk screening tools and nutrition assessments
- Advocate for broader payment sources including insurance coverage, reimbursement, funding, and value associated with RDN role using documented outcomes

Promote Role of RDN

- Change hospital procedures to ensure that RDNs are seeing all high-nutrition-risk patients before discharge and are included on discharge-planning teams
- Promote the RDN role in identifying, treating, and improving health care outcomes for older adults with malnutrition to insurers, health care administrators, health care providers, communities, and legislators

- Promote value of having full-time and/or increased number of home care RDNs available to provide older adults who are malnourished or at risk for malnutrition with comprehensive nutritional care. Targets would be legislators, health care administrators, and communities
- Promote importance of having RDNs available for AAA nutrition services to provide older adults who are malnourished or at risk for malnutrition with comprehensive nutritional care, including follow-up visits. Targets would be: legislators, health care administrators, and communities

Share Nutrition Information During Transitions of Care

- Change procedures for discharge planning to include a focus on nutrition and provide information on community food and nutrition programs
- Provide training on HIPAA for better understanding to support information-sharing during transitions of care

Use Electronic Medical Records to Maximize Nutrition Care

- Work with EMR software companies and health care administrators to include sections for nutrition screening and assessment questions, nutrition recommendations, nutrition progress notes, and nutrition discharge planning.
- Ensure included sections don't reduce information by restricting the character count.

Ensure Adequate Funding

- Advocate for changes in payment systems to allow billing for malnutrition treatment in outpatient and home care settings
- Work with legislators, insurers, community officials, and community champions to provide adequate funding to support nutrition programs so that they can evolve to attract older adults in need of nutritious meals that appeal to them. Provide structure that supports social and wellness programming
- Advocate for more governmental and community support to enhance community food and nutrition program access and funding

Appendix E displays the focus group questions posed that elicited the themes summarized above.

KEY FINDINGS

Malnutrition in older adults is under diagnosed in all care settings with communication gaps about nutritional care as older adults transition across care settings. This results in higher risks for negative health outcomes related to malnutrition. Nutrition practitioners report receiving little or no nutrition information as older adults are transitioned to their care setting. Electronic medical records have limited nutrition information in discharge summaries and create communication challenges for those with different electronic medical record systems. When nutrition information is missing, significant time is required to obtain information from previous care providers.

Barriers identified for assessing malnutrition in long-term care include lack of time, unavailable historical nutrition information, and RDNs not trained in using the Nutrition Focused Physical Exam (NFPE). In the hospital setting, barriers include lack of time, inadequate historical nutrition information, incomplete RN nutrition screening, short length of stay and last-minute discharges. Outpatient, home and community-based nutrition practitioners identified similar issues plus not having a validated nutrition screening tool, staff not referring at-risk clients, client not receptive to nutrition services, care managers lack awareness of malnutrition and the impact on older adults and cost prohibitive out-patient nutrition counseling.

Examples of best practices in providing transitional care to malnourished older adults identified include: developing a list of community food and nutrition resources to be distributed by RDNs, discharge planners, primary care providers or emergency departments; registering older adults for congregate or home delivered meals prior to discharge and documenting in medical record; and communicating with RDN from the admitting facility. Hospital practitioners reported using NFPE; improving coding for malnutrition in medical records; communicating nutrition diagnosis for malnutrition to physician along with recommendations for follow-up post-discharge; and including nutrition information in the discharge summary. Senior nutrition programs reported providing nutrition counseling for older adults screened to be malnourished or at risk for malnutrition. They perform the NFPE with hand grip measurement and work with community nurse or case manager for follow-up.

Recommendations for making community nutrition programs a part of discharge planning included: marketing; brochures with information about the program and services; providing SNAP information; educating discharge planners; simplifying access to food and nutrition programs; developing meal programs to be more acceptable to older adults; using health coaches to help promote nutrition programs and services to older adults; and obtaining adequate funding to ensure program is available.

CALL TO ACTION

There is a need to address barriers to alleviating malnutrition in older adults as they transition across the continuum of care. Nutrition screening, nutrition assessment, malnutrition diagnosis documentation, and treatment plan initiated in the hospital need to be communicated to the next care provider. Nutrition practitioners have identified promising practices and strategies to be considered in addressing malnutrition of older adults during care transitions.

- Provide consistent screening for malnutrition and food insecurity
- Use electronic medical records to maximize nutrition care
- Share nutrition information during transitions of care
- Promote and make referrals to community food and nutrition programs
- Enhance community nutrition programs to meet needs of older adults who are malnourished or at risk for malnutrition
- Document outcomes and demonstrate value
- Promote role of RDN
- Ensure funding

CONCLUSION

Challenges and opportunities are facing health care providers and community food and nutrition programs to better integrate malnutrition care into care transitions. The “Addressing Malnutrition in Older Adults During Care Transition: Current State of Assessment” report provides insight into areas for improving transition care, recommendations for system improvements, and promising practices to better meet the nutritional needs of older adults. As the population of vulnerable older adults increases, care providers, community food and nutrition programs, policy makers, payers, patients, and caregivers can work collectively to improve malnutrition care of older adults.

APPENDICES

APPENDIX A. ACRONYMS

ACRONYM	DESCRIPTION
AAA	Area Agencies on Aging
ACO	Accountable Care Organization
ADRC	Aging and Disability Resource Center
ASAP	Aging Service Access Point
ASPEN	American Society for Parenteral and Enteral Nutrition
BWH	Brigham and Women's Hospital
CCRC	Continuing Care Retirement Community
CMS	Centers for Medicare & Medicaid Services
DC Planner	Discharge Planner
DON	Director of Nursing
DPG	Dietetic Practice Group
EML	Electronic mailing list
EMR	Electronic Medical Record
EOEA	Executive Office of Elder Affairs
HBPC	Home-Based Primary Care
HCBC	Home & Community-Based Care
HIPAA	Health Insurance Portability and Accountability Act
HSL	Hebrew Senior Life
ICD-10	International Classification of Disease, 10th Revision
IMPACT Act	Improving Medicare Post-Acute Care Transformation Act

ACRONYM	DESCRIPTION
LTC	Long-Term Care
MA	Massachusetts
MCOA	Massachusetts Association of Councils on Aging
MDoA	Maryland Department on Aging
MNA	Mini Nutritional Assessment
MNA-SF	Mini Nutritional Assessment - Short Form
MNT	Medical Nutrition Therapy
MQii	Malnutrition Quality Improvement Initiative
MST	Malnutrition Screening Tool
MUST	Malnutrition Universal Screening Tool
NCP	Nutrition Care Process
NDTR	Nutrition and Dietetics Technician Registered
NFPE	Nutrition Focused Physical Exam
NPACC	National Post-Acute Care Continuum
PACE	Patient All Inclusive Care for the Elderly
PALTC	Post-Acute and Long-Term Care
PCP	Personal Care Physician
PDPM	Patient Driven Payment Model
PPS	Prospective Payment System
RDN	Registered Dietitian Nutritionist
SAMS	Social Assistance Management System
SDOH	Social Determinants of Health
SGA	Subjective Global Assessment

ACRONYM	DESCRIPTION
SNAP	Supplemental Nutrition Assistance Program
SNF	Skilled Nursing Facility
SOP	Standards of Practice
SOPP	Standards of Professional Performance
SUA	State Units on Aging
TOC	Transitions of Care
USDA	US Department of Agriculture
VA	Veterans' Administration
VNA	Visiting Nurse Association

APPENDIX B. BETTER INTEGRATION OF MALNUTRITION CARE INTO CARE TRANSITIONS IS NECESSARY

Better Integration of Malnutrition Care into Care Transitions Is Necessary /

Nutrition Health of US Population

Malnutrition, defined as a nutrition imbalance including under-nutrition and over-nutrition, is a pervasive, but often under-diagnosed, condition in the United States. This prevalence is exacerbated among those who are already ill: chronic diseases such as diabetes, cancer, and gastrointestinal, pulmonary, heart, and chronic kidney disease and their treatments can result in changes in nutrient intake and ability to use nutrients, which can lead to malnutrition.

Malnutrition Prevalence Across Care Settings



Acute Care¹
20–50%



Post-Acute Care²
14–51%



Community Care^{3,4}
6–30%

More than 40% of patients age 50+ are not getting the right amount of protein each day⁵

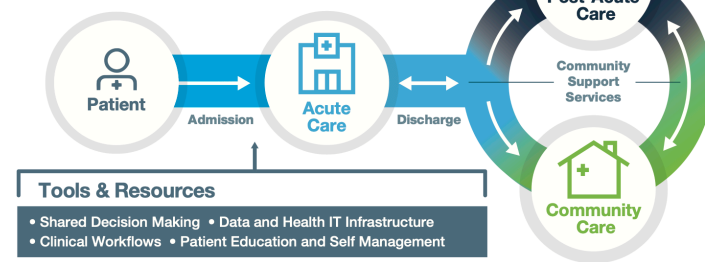
70% of adults are overweight or have obesity⁶

Existing Patient Care Transitions Pathway

Too often, as patients transition from one point of care to another, their nutrition status is not evaluated, documented, or even included in patient health conversations. Lack of evaluation and management can result in negative health and financial outcomes as malnourished adults have been found to utilize more health services with more visits to physicians, hospitals, and emergency rooms.

Determinants of Patient Experience and Outcomes Across Settings of Care

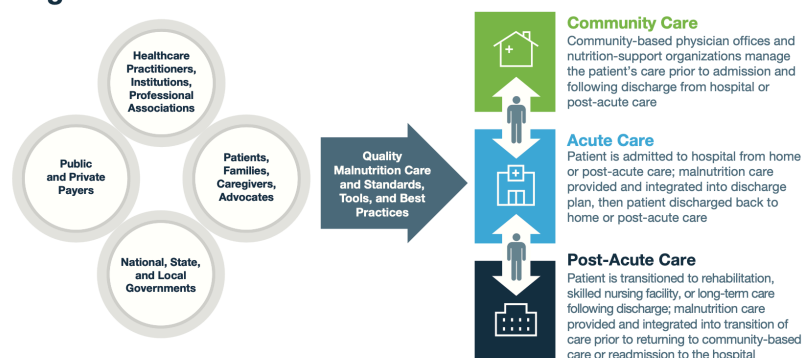
- Social Determinants of Health
- Incentives
- Disease and Chronic Conditions
- Population Health Management



KEY TAKEAWAY: Nutrition Status Is Missing

Recommendations to Integrate Malnutrition Care into Care Transitions

In March 2018, a multi-stakeholder group of health and community leaders and advocates came together in a national Dialogue, “Advancing Patient-Centered Malnutrition Care Transitions,” to focus on developing real-world solutions to better integrate nutrition risk identification and care into existing care transition pathways and accountable care models.



US Economic Burden of Disease-Associated Malnutrition Is Estimated to be \$157 Billion Annually

¹ Barker LA, Gout BS, Crowe TC. Hospital malnutrition: Prevalence, identification, and impact on patients and the healthcare system. *Int J Environ Res Public Health*. 2011;8:514–527.

² National Resource Center on Nutrition Physical Activity and Aging. Malnutrition and Older Americans.

³ Guigoz Y. The Mini Nutritional Assessment (MNA) review of the literature—What does it tell us? *J Nutr Health Aging*. 2006;10:466–487.

⁴ Snider JT, Linthicum MT, Wu Y, et al. Economic burden of community-based disease-associated malnutrition in the United States. *JPEN J Parenter Enteral Nutr*. 2014;38(2 Suppl):775–85S.

⁵ Estimated (Age-Adjusted) Percentage of US Adults with Overweight and Obesity by Sex. 2013–2014 NHANES data.

⁶ NHANES data from 2007–2008.

Recommendations to Advance Malnutrition Care as Patients Transition Across Care Settings /



Clinicians, community and social service providers, patients and caregivers, payers, and policymakers can take action to address care gaps using key recommendations identified during the Dialogue. By partnering to (1) support systematic nutrition screening and care, (2) provide better education and shared decision making, and (3) improve data infrastructure to capture and share critical nutrition information, stakeholders can facilitate enhanced care coordination and better outcomes for patients across care settings.






Screening & Nutritional Care

-  Integrate nutrition status considerations into existing protocols, pathways, and models (e.g., disease-specific protocols and pathways, transitional care models)
-  Adopt and disseminate existing guidelines and protocols that recommend actions for optimal nutrition care (i.e., population health)
-  Implement systematic screening in post-acute and community settings using existing standardized malnutrition screening tools (Appendix 4)
-  Align incentives (e.g., policy and financial) with malnutrition care delivery beyond the hospital (i.e., community setting) to improve prevention, identification, and management
-  Engage and empower community-based clinicians and providers (e.g., retail pharmacists, home health workers, social workers, meal delivery organizations‡, behavioral health counselors) to help patients achieve nutrition goals
-  Educate clinicians and social service providers about the impact of malnutrition/poor nutrition, their role in identifying it (including when and how to screen for malnutrition, as well as available tools and interventions such as medical nutrition therapy), and the importance of nutrition interventions
-  Educate payers on the impact of poor nutrition/malnutrition on patient outcomes and healthcare costs and the value of nutrition care coverage

Patient Education & Shared Decision Making

-  Expand the use of shared decision making and education tools and create new tools as needed to engage patients/families/caregivers in discussions about nutrition care and better inform clinicians in clinical and community settings on nutrition information
-  Deliver information to patients/families/ caregivers in a way that is sensitive to their understanding of malnutrition, culture, and health literacy

-  Educate patients/families/caregivers on how to discuss nutrition goals with patients' doctors and care providers
-  Educate patients/families/caregivers on how to support nutrition-related needs (e.g., preparing meals, coordinating food with medication management, providing oral nutrition supplements, changing tube feeding)
-  Partner with community-based organizations (e.g., Area Agencies on Aging and other providers) to raise broader population understanding of malnutrition and its impacts on patient health

Data Infrastructure

-  Adopt standardized malnutrition terminology and clinical standards in electronic health records (EHRs) to improve malnutrition risk identification and data transfer across care settings
-  Generate evidence and publish data reflecting the impact of nutrition status on clinically relevant outcomes in post-acute and community settings (e.g., admissions/readmissions, activities of daily living, quality of life)
-  Expand the use of tools (e.g., alerts, hard stops) and visibility of nutrition information in EHRs to enhance nutrition-related decisions and communicate nutrition information to relevant clinicians
-  Conduct informatics skill training for dietitians and other healthcare professionals supporting patients' nutrition needs
-  Identify mechanisms to share relevant social determinant-related data with clinicians and providers in a manner that is compliant with regulatory requirements and supports patient/family/caregivers' ability to maintain/improve patients' nutrition status
-  Create and adopt new technologies focused on malnutrition prevention and intervention (e.g., apps, wearables)

* This category encompasses clinical associations, clinical member organizations, social workers, mental healthcare providers, and other clinical/community and social service providers.

† This category encompasses patients and caregivers, as well as representatives of patients (e.g., patient advocacy groups, Patient and Family Advisory Councils).

‡ Meal delivery includes home-delivered as well as congregate meals.



Support for the Dialogue was provided by Abbott



July 2018

 Read the full Dialogue Proceedings publication here: <https://avalere/2Lk7LkO>

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APPENDIX C. OHIO SENIOR MALNUTRITION AND FOOD INSECURITY SCREENING TOOL

Older Adult Malnutrition and Food Insecurity Screening

The Ohio Department of Health (ODH) recently convened a multi-stakeholder statewide commission to look at malnutrition in Ohio, and issued a report with policy recommendations and local strategies to address malnutrition (https://docs.wixstatic.com/ugd/c577a8_48c4ffc3726b4f64939760bb76f0c35b.pdf).

Partners in Central Ohio felt that the time had come to develop a common, regional plan to address senior malnutrition and ways to implement the ODH Commission Report's policy recommendations. The first result of this work is the following tool that all providers—physicians (independent practices and hospitalists/specialists), nurses, social service agencies, care coordinators, and registered dietitians—can utilize to quickly identify BOTH malnutrition AND food insecurity risk with their older adult patients/clients, as well as provide direction and resources regarding next steps based on the results.

MALNUTRITION SCREENING TOOL ¹		
1. Have you recently lost weight without trying?		
No	0	
Not Sure	2	
Yes	1	
<i>If yes, how much weight have you lost?</i>		
2-13 lbs	2	
14-23 lbs	3	
24-33 lbs	4	
34 or more lbs	4	
Unsure	2	Question 1 Score:
2. Have you been eating poorly because of decreased appetite?		
No	0	
Yes	1	
		Question 2 Score:
		Total Score:

Results

Questions 1 & 2 Total	
Score of 0-1	Patient is not at risk for malnutrition; screen again in 1 year or if condition changes.
Score of 2 or more	Patient is at risk for malnutrition and needs a referral to registered dietitian and/or a healthcare provider and ongoing monitoring.

¹ Ferguson M, et al. Nutrition. 1999;15(6):458-464.

Resources

- Find a [Registered Dietitian Nutritionist \(RDN\)](#)
- Congregate Meals:** served in group settings, provide nutritious meals and opportunities for social interactions
- Home Delivered Meals:** often referred to as “meals on wheels,” provides nutritious meals delivered to the door of older adults with limited mobility, who are homebound, or have a lack of transportation

Helpful Conversation Starters:

- Malnutrition can be caused by not getting enough of the nutrients your body needs to stay healthy or recover. You can be underweight or overweight and be malnourished. Have you ever been screened for malnutrition before?
- Have there been any changes in your health or life that may have caused weight loss?

For more information, visit the [Ohio Department on Aging](#).

FOOD INSECURITY SCREENING TOOL ^{1, 2}	
1. Within the last 12 months, I worried whether my food would run out before I had money to buy more.	
Often True	
Sometimes True	
Never True	
2. Within the last 12 months, the food I bought just didn't last and I didn't have money to get more.	
Often True	
Sometimes True	
Never True	

Results

Questions 1 & 2 Responses	
Never true for both questions	Patient is not food insecure; screen again in 1 year or if living conditions change.
Often true/sometimes true for one or both questions	Patient should be referred to meal services (see resources section) and/or a foodbank/food pantry; continue to monitor.



Resources

- **Congregate Meals:** served in group settings, provide nutritious meals and opportunities for social interactions
- **Home Delivered Meals:** often referred to as “meals on wheels,” provides nutritious meals delivered to the door of older adults with limited mobility, who are homebound, or have a lack of transportation
- **Senior Farmer’s Market Nutrition Program:** provides coupons for older residents that can be redeemed for fresh feeds from farmers’ markets and roadside stands (available in select counties)
- **Commodity Supplemental Food Program:** supplements the diets of older adults with nutritious foods
- **Supplemental Nutrition Assistance Program (SNAP):** provides nutrition benefits to supplement the food budget of those in need

Helpful Conversation Starters:

- Just like your medication is important to keep you healthy, food is medicine too. Have you ever learned about the importance of getting enough nutritious food before?
- Who typically does the shopping for food in your home?
- I noticed you are having trouble getting enough healthy foods. Are you aware of the options available to you to access food or resources to buy food?

For more information,
visit the [Ohio Department on Aging](#).

¹ Hager ER, et al. Pediatrics. 2010;126(1): e26-e32.

² Gundersen C, et al. Public Health Nutr. 2017;20(8):1367-71.

APPENDIX D. ADDRESSING MALNUTRITION IN OLDER ADULTS DURING CARE TRANSITIONS SURVEY TOOL

1. Malnutrition in Older Adults in Clinical/Hospital Settings - Survey of RDNs to identify best practices and barriers.

Malnutrition in older adults is pervasive but often unrecognized. National projects such as Defeat Malnutrition Today and Malnutrition Quality Improvement Initiative (MQii) provide guidelines and best practices for screening and addressing malnutrition in the hospital through discharge planning. The opportunity exists to identify practice-informed strategies across the continuum of care to support care for older adults with a focus on the use of home and community-based services in addressing their nutrition needs. The survey should take less than 15 minutes to complete. Thank you for your participation.

Questions:

1. What type of organization/facility best represents the area you work in?
2. What best describes your organizational setting?
3. Is nutrition screening done on older adults prior to surgery?
4. What are the barriers for assessing for malnutrition in older adults in your care setting?
5. What information about malnutrition in older adults and the nutrition care plan are included in the discharge plan?
6. Describe follow-up provided post-discharge on older adults identified with malnutrition.
7. What are the barriers in the transition of care process for communicating nutrition interventions?
8. Identify successes or best practices you have implemented to identify malnutrition in older adults in your facility.
9. Identify successes or best practices you have implemented to integrate malnutrition care into care transitions to other facilities or home.
10. In your opinion, what would make community nutrition resources, such as congregate or home-delivered meals and food assistance programs, more a part of the care planning/discharge process?

2. Malnutrition in Older Adults in Long-Term Care Settings - Survey of RDNs to identify best practices and barriers.

Malnutrition in older adults is pervasive but often unrecognized. National projects such as Defeat Malnutrition Today and Malnutrition Quality Improvement Initiative (MQii) provide guidelines and best practices for screening and addressing malnutrition in the hospital through discharge planning. The opportunity exists to identify practice-informed strategies across the continuum of care to support care for older adults with a focus on the use of home and community-based services in addressing their nutrition needs. The survey should take less than 15 minutes to complete. Thank you for your participation.

Questions:

1. What type of organization/facility best represents the area you work in? (Long-term care facility, Skilled facility, Rehabilitation facility, Other)

2. What best describes your organizational setting? (Urban, Rural)
3. What best describes your organization? (health care system, Independent organization, VA facility, ACO, Governmental organization, Other)
4. Describe the nutrition care information provided from a previous facility for an older adult being admitted to your facility.
5. What are the barriers for assessing malnutrition in older adults in your care setting?
6. When malnutrition is identified and a care plan is developed in your facility, how is this information communicated upon discharge to next facility, the older adult, or caregiver?
7. Describe how you are involved with post-discharge follow-up regarding the malnutrition care plan.
8. Identify successes or best practices you have implemented to identify malnutrition of older adults and integrating malnutrition care into care transitions to other facilities or home.
9. In your opinion, what would make community nutrition resources, such as congregate or home-delivered meals, food assistance programs and nutrition counseling by a dietitian, more a part of discharge planning?

3. Malnutrition in Older Adults in Ambulatory Settings - Survey of RDNs to identify best practices and barriers.

Malnutrition in older adults is pervasive but often unrecognized. National projects such as Defeat Malnutrition Today and Malnutrition Quality Improvement Initiative (MQii) provide guidelines and best practices for screening and addressing malnutrition in the hospital through discharge planning. The opportunity exists to identify practice-informed strategies across the continuum of care to support care for older adults with a focus on the use of home and community-based services in addressing their nutrition needs. The survey should take less than 15 minutes to complete. Thank you for your participation.

Questions

1. What type of organization/facility best represents the area you work in? (Hospital outpatient clinic, Physician office, Public health clinic, VA clinic)
2. What best describes your organizational setting? (Urban, Rural)
3. Is nutrition screening routinely done on older adult patients?
4. What are the barriers for assessing for malnutrition in older adults in your care setting?
5. When malnutrition in older adults is identified and a care plan is developed, describe how this information is communicated with others, i.e., the patient, caregivers, physician or hospital if they are to be admitted.
6. What is the role of the dietitian/nutritionist in providing follow-up on the older adult's malnutrition care plan?
7. What are barriers in the transition of care process for communicating interventions to address malnutrition in older adults?

8. Identify successes or best practices you have implemented to identify malnutrition in older adults and integrating malnutrition care into care transitions to other facilities or home.
9. In your opinion, what would make community nutrition resources, such as congregate or home-delivered meals and food assistance programs, more a part of the care planning process?

4. Malnutrition in Older Adults in Home and Community Settings - Survey of RDNs to identify best practices and barriers

Malnutrition in older adults is pervasive but often unrecognized. National projects such as Defeat Malnutrition Today and Malnutrition Quality Improvement Initiative (MQii) provide guidelines and best practices for screening and addressing malnutrition in the hospital through discharge planning. The opportunity exists to identify practice-informed strategies across the continuum of care to support care for older adults with a focus on the use of home and community-based services in addressing their nutrition needs. The survey should take less than 15 minutes to complete. Thank you for your participation.

Questions:

1. What type of organization/facility best represents the area you work in? (Home care agency, Older American Nutrition Program, Senior Nutrition Program Provider, Other)
2. What best describes your organizational setting? (Urban, Rural)
3. What is the criteria for conducting nutrition screening on older adults? (Nutrition screening is done on all older adults, Nutrition screening is done on older adults suspected of having malnutrition, Other)
4. What nutrition screening tool do you use? (Malnutrition Screening Tool (MST), Malnutrition Universal Screening Tool (MUST), Subjective Global Assessment (SGA), Mini Nutritional Assessment Short Form (MNA-SF), DETERMINE Checklist, Other)
5. When an older adult is new to your program/service, how is nutrition care information provided to your program/service? (Physician, Referring agency, Family/friends, the older adult, Other)
6. When malnutrition is identified and a plan is developed to improve nutritional status, this information is shared with (The older adult, Care providers/family, Case manager, Health care provider, All of the above, Other)
7. Describe follow-up provided on older adults identified with malnutrition.
8. What are barriers for assessing for malnutrition in older adults in your care setting?
9. What are barriers in the transition of care process for communicating interventions to address malnutrition in older adults?
10. Identify successes or best practices you have implemented to identify malnutrition in older adults and integrating malnutrition care into care transitions to other facilities or home.

CURRENT STATE SURVEY OF REGISTERED DIETITIAN NUTRITIONISTS SUMMARY

Responses are in descending order with first item having the most responses. Survey n=59

Type of Organization

- a. Long-Term Care
 - Long Term Care (LTC)
 - Continuing Care Retirement Community (CCRC) with LTC
 - Rehab
 - Skilled
- b. Hospital
 - Acute hospital
 - Critical access hospital
 - Rehabilitation facility
 - Short stay facility
- c. Outpatient
 - Private practice
 - Hospital outpatient clinic
- d. Home & Community-Based Care (HCBC)
 - Senior Nutrition Programs
 - Home care agency
 - Program for All Inclusive Care for the Elderly (PACE)/Accountable Care Organizations (ACO)
 - Continuing Care Retirement Community (CCRC)
 - VA

When an older adult is newly admitted, describe the nutrition care information provided from previous program/service? (Source of information)

- a. Long-Term Care
 - Not much nutrition information is received
 - Occasional nutrition assessment and RDN note
 - Diet order—it may be confusing or inappropriate
 - History and physical; diagnosis, labs and meds
 - Tube feeding and supplement orders
 - “Generally, we receive diet order only. Rarely would we receive progress notes, interventions provided or trialed or care plan information.”
- b. HCBC
 - Referring agency/medical records

- The older adult (patient)
- Family/caregiver
- RDN
- Physician
- Nurse

What are the criteria for conducting nutrition screening on older adults?

- Hospital
 - Is screening done prior to surgery? 60% yes
 - Not within most clinics
 - This is not mandatory unless they are admitted into hospital
 - By some offices; not all
- Outpatient
 - Is screening routinely done? N=3
 - Yes = 1
 - No = 2
- HCBC/Nutrition Programs
 - Nutrition screening is done on all older adults receiving home-delivered and congregate meals
 - Nutrition screening is done on older adults suspected of having malnutrition
- HCBC/Home care
 - Nutrition screening is done on adults that RDN's are given referrals to
 - Nutrition screening done by RDNs
 - A simple nutrition screening is done by RN
 - Unsure

What nutrition screening tool do you use?

- HCBC
 - Mini Nutritional Assessment Short Form (MNA-SF)
 - Malnutrition Screening Tool (MST)
 - "The MST questions were recently added to the National Aging Program Information Systems (NAPIS) form for home-delivered meal clients."
 - Malnutrition Universal Screening Tool (MUST)
 - Subjective Global Assessment (SGA)
 - Sodexo's Identification Grid 2017
 - Leaning toward MNA-SF
 - NSI
 - Our own nutrition assessment form/Own tool—with parts of MUST, MST, and MNA
 - MNT Nutritional Assessment
 - None

What are the barriers for assessing for malnutrition in older adults in your setting?

- a. Long-Term Care
 - Lack of time
 - Historical information not available (older adult unable to provide or not provided from hospital)
 - RDN not trained in NFPE
- b. Hospital
 - Provider: Documents malnutrition but not consulting RDN consistently; does not understand screening criteria or need for screening; belief that screening takes too much time; focus only on medicine
 - Lack of RDN time
 - Inadequate information available (older adult and/or family does not know, information not in medical records or available from provider office)
 - Screening by RN incomplete
 - Short stays
 - No policy in place to assess short stay older adults
 - MST not performed on planned surgeries
 - No screening tool
- c. Outpatient
 - Lack of access to medical records in private practice
 - RDN: Lack of time/Insufficient RD staff to assess malnutrition/lack of training in identifying malnutrition in outpatient setting
 - Provider: Confusion regarding malnutrition criteria/not making referrals
 - No screening tool implemented in clinics
- d. HCBC
 - Historical information not available (older adult not able to provide)
 - Lack of uniform assessment tool and staff training to use tool
 - Lack of time
 - Staff not referring at-risk clients
 - Caregiver issues
 - Labs and weights not available
 - Client not receptive
 - Screenings use self-reporting
 - Lack of awareness of care managers
 - Unable to monitor older adult at home
 - Lack of policies and procedures for assessing clients

When malnutrition is identified and a plan is developed to improve nutritional status, how is this information communicated upon discharge?

- a. Long-Term Care
 - Information is on discharge summary—recommend that assessment and notes be sent
 - “Via discharge summary provided to the resident/care giver including location of businesses that can provide specialized nutrition products or mail order options; offer of Meals on Wheels (MOW) and response to offer is charted and contact with local MOW is made if resident wants it set up”
 - Reviewed at care conference. Social workers set up MOW or call next facility
 - Arrange MOW if patient wants
 - Unsure, not done by RDN
- b. Hospital
 - Nutrition information in discharge summary (includes supplements, recommendations for MOW)
 - Weight, diet, supplements, but not information specifying risks for malnutrition
 - Handouts
 - “We’re in the process of tasking primary care providers when their patients are diagnosed with malnutrition. This lets them know the diagnosis and what we recommend; the provider to monitor and/or discuss with the patient at his/her next visit.”
- c. Outpatient
 - Information shared with client and doctor
 - EMR notes, no formal plan is identified
 - Intervention is implemented together with patient/caregivers. Inter-professional team is made aware and collaboration initiated depending on who (MD, Social Worker, etc.) is needed
 - “Our inpatient RDs communicate with our outpatient RDs”
 - There is no formal discharge plan in our outpatient clinics
- d. HCBC

Information shared with:

 - The older adult
 - Care providers/family
 - Case manager
 - Health care provider
 - There is no set practice between the nutrition programs on follow-up with these consumers
 - Health care provider is dependent on client permission

What are barriers for communicating interventions to address malnutrition in older adults in the transition of care process?

- a. Hospital
 - Accessing medical records (different EMR systems—other RDNs cannot see notes; inadequate discharge template for nutrition in EMR; nutrition notes not always on discharge summary; RDN notes get lost in masses of discharge papers)
 - Lack of time

- Last-minute discharge
 - Caregivers may not be present to hand discharge information to
 - Outpatient MNT may be cost-prohibitive
 - Patient discharged to home may not be able to afford supplements or information about supplements may not be on discharge paperwork
- b. Outpatient
- Private practice—there are many
 - The communication between acute and post-acute care
 - Challenges are when patient returns to own community with a primary care provider outside health care network, making communication difficult
 - Lack of awareness of community resources
 - Lack of RDNs in physician practices
 - Health providers not aware of role of RDNs in the prevention and treatment of malnutrition
 - Lack of physician support
 - Outpatient MNT is cost-prohibitive for most older adults
- c. HCBC
- Older adult's cognition
 - Accessing medical records/communication issues
 - Time/staffing issues
 - Caregiver issues
 - Last-minute discharge
 - RDN not involved in discharge planning
 - Financial resources
 - Language
 - “For identifying malnutrition, doing a full detailed assessment (physical findings, observation at meals); For integrating malnutrition care, I try to provide discharge education but many times I am not involved in the discharge planning and am only there a limited amount of time each week.”

Describe follow-up on older adult identified with malnutrition.

- a. Long-Term Care
- No RDN follow-up
 - Follow up if RDN feels that it is critical
 - DON contacts at 24 hours/72 hours/1 week/2 week/30-day post-discharge
- b. Hospital
- No follow-up
 - No insurance coverage
 - Up to provider
 - RN follows up with phone call
 - Oncology refers to oncology outpatient RDN

- Discharge to home health seen by RDN with referral
- Hospital RDN can refer to outpatient RDN—not done often due to lack of staff

c. Outpatient

- Private practice—RDN role is vital, in some cases, clients are lost to follow-up or can no longer afford services
- Outpatient—As clinically needed. Insurance coverage is often a huge barrier
- The RDN is the sole person who implements and follows up on the plan

Identify a success or best practice you have implemented to identify and address malnutrition and integrate malnutrition care into care transitions.

a. Long-Term Care

- Via discharge summary, the resident/caregiver is provided the name and location of businesses that can provide specialized nutrition products or mail order options; offer of home-delivered meals and response to offer is charted and contact made with local home-delivered meal provider if resident wants it set up
- Coordinate discharge with social worker and family
- Communication with RDN from the admitting facility is made, if at all possible, for continuity of care; use of malnutrition criteria during assessment and then communicated with physician to implement best options for the resident; communication with resident/caregiver to determine what options have worked/may work/will be tolerated by the resident
- We assess all residents within 5 days. Nutritionally at-risk residents are monitored by all care plan disciplines. Nutritional information is shared during discharge assessment and planning
- Standardize reweigh process for monthly weigh-ins
- Monitor our inpatients identified with malnutrition and transition to our home health care
- Becoming the “expert” in identifying malnutrition and communicating that to the providers in order to mitigate nutrition risk
- Communication with the interdisciplinary care team
- Patients at risk for malnutrition are evaluated every 6 months by RDN and more frequently as needed
- Discussions of who does shopping and when; is there a difficulty getting to the store, carrying groceries or answering the door at home? Activity level recommended to complete cooking activities, ability to stand at stove etc. Coordinate with social work and families as needed to provide direct assistance if needed
- Speaking directly to resident, family or caregivers. Provide handouts and education
- One-on-one interviews and nutrition assessments provided by RDN or Nutrition and Dietetic Technician Registered (NDTR) on every new admit to our facility
- If they go to another facility, we send a packet with all pertinent notes
- We might send the client home with a referral to MOW
- All patients diagnosed with malnutrition are referred to the RDN for intervention. Social workers or discharge planners set up Meals on Wheels if needed and eligible
- Use the mini-MNA screen upon admission and quarterly
- If going home, we meet with the family and have discussions regarding care needed at home (nutrition care)

b. Hospital

- We complete NFPE
- “We’re in the process of tasking primary care providers when their patients are diagnosed with malnutrition. This lets them know the diagnosis and what we recommend the provider to monitor and/or discuss with the patient at his/her next visit.”
- Several business plans in the works to increase staffing to do follow-up more effectively
- We have an active program to identify and document malnutrition in our hospitalized patients. RDNs complete a NFPE. Communicate in the EHR to practitioner
- Physical assessments, best-practice alerts to doctors, staff messaging doctors and nutrition education
- 1) Implemented the MST for all patients (inpatient, ambulatory care, emergency department). 2) Just started to screen for food insecurity (Vital Signs validated screening tool). We’re starting in the emergency department in hopes of including it in the inpatient, outpatient and clinic settings too. 3) The dietitians work closely with the coding specialist to identify patients and code them. We also communicate with the physicians and providers so that malnutrition is included in the problem list. 4) We perform nutrition-focused physical exams. 5) We use Meditech to chart and have adapted our charting to include/highlight malnutrition
- As with all hospitals, there is screening on admission. Additionally, an RDN reviews the patient list and looks for high-risk diagnoses or elderly patients and does an additional screen. I recently went to training on nutrition-focused physical exams and will train the other RDN at the facility
- Met with our hospitalist team to help them better identify malnutrition and recommend consult to RDN
- We switched over to Malnutrition Screening Tool
- Developed a malnutrition alert. Every patient with malnutrition has treatment criteria, interventions in place, and education provided to family. We work closing with coding team. Have had NO denials that we couldn’t defend
- We use the ASPEN/Academy criteria and a malnutrition tracking program developed by Sodexo
- MST Screen within 24 hours, supplement added when at risk for malnutrition, nutrition assessment and education within 24 hours of MST. Multi-disciplinary rounds attendance to ensure malnutrition is recorded in patient record by provider for accurate documentation and coding
- Training for new staff, meal service updates, weight checks and nursing referral to MD and/or dietitian if any significant weight changes identified, routine follow-ups with all patients and encouraging referrals as needed

c. Outpatient

- Our standard protocols for care planning include referrals to food assistance programs such as home-delivered meals. We access resources online and identify locations/resources within easy reach

d. Home Care Agency

- Full assessment on initial enrollment and annually; close weight monitoring; interdisciplinary team approach where RD is informed about intake, weights, pressure ulcers, by other team members; facilitating good communication with community partners who care for these adults and can report poor intake, weight changes, etc.
- Identifying and treating food insecurities

e. PACE Home Care

- Program participants are followed at least annually by an RDN and we are well integrated into the care team. If there are concerns, other care team members are quick to refer to RDN
 - Patients at risk for malnutrition are evaluated every 6 months by RDN and more frequently as needed
- f. VA Home Care
- RDN seeing all patients within 30 days of admission to program
- g. Senior Nutrition Program
- NFPE, hand grip measurements; community nurse follow-up
 - Identifying the MST as the best tool to use for our setting and incorporating those questions in the nutrition assessment required for home-delivered meal eligibility; dedicated focus on malnutrition education for community groups; development of malnutrition clinics and the designation of a malnutrition awareness week during Older Americans Month; assessing nutrition programs' current procedures when a consumer scores at risk of malnutrition
 - We can do follow-up home visits, propose supplements and additional meals, good teamwork
 - Best practice comes from communication with everyone involved in a person's care

In your opinion, what would make community nutrition resources more a part of discharge planning?

- a. Long-Term Care
- Use brochures with resources
 - RDN be more involved in discharge planning
 - More communication with community RDNs and referral sources
 - RDNs need time
 - Improved communication with caregivers
 - Educating discharge planners
 - Reach out to community resource so they contact patient
 - Limited resources in rural areas
- b. Hospital
- Resource brochure: Have it very easy for RDNs as well as discharge planners to order prior to discharge/to keep accurate information on what programs are available. I created a food/nutrition community resource handout for patients. I've given those to the emergency department and the inpatient case managers to offer to patients. I also provide it to the common areas of the hospital for visitors to see. We include SNAP brochures in the emergency department and common areas as well. Ideally the food security screen would lead to the intervention of providing these resources to patients. Ultimately, having the food insecurity screen in the primary care clinics would assist with this tool
 - Information on how to access or sign up for them, not much known on a list of programs and eligibility
 - Have representation from these programs on committees within the hospital and outpatient settings to improve collaboration and communication among caregivers to help identify patients that would benefit from their service. If not already done, include in documentation templates to help caregivers
 - More affordable to those on fixed incomes, that don't qualify for assistance

- Increased availability in our surrounding area/some services are limited
- Have sites set up in rural as well as urban centers
- Staffing to implement
- Connecting with food assistance programs
- Ease of obtaining these for patients; If they could help patients sign up for services; Improved referral process. This is often run by a church and not a great process
- Patient acceptance. We do run into the problem of patients or caregivers who don't want to depend on others to help provide a service, or who feel they can do a better job themselves, or who don't like the food, or feel they can't afford the service. Plus, some don't live near a congregate dining site.

c. Outpatient

- Funding
- Data infrastructure to support referrals
- Surveying awareness of discharge planners on utilization of these Home and Community Based (HCBS) and any barriers they may have to referring
- Have protocols for making referrals
- Easy access to resources and contact information online
- Education of healthcare providers regarding importance and availability of community nutrition programs
- Information about improved patient outcomes from community nutrition programs

APPENDIX E: ADDRESSING MALNUTRITION IN OLDER ADULTS DURING CARE TRANSITIONS FOCUS GROUP

Focus Group Invitation for Hospital RDNs and Discharge Planners

You are invited to join a one-time focus group to discuss malnutrition in older adults in health care settings with a focus on discharge planning. Carlene Russell is working with Meals on Wheels America and will facilitate the focus group to identify promising practices to better serve older adults as they transition to other care settings. This project will build on efforts of the Defeat Malnutrition Today Coalition and the Malnutrition Quality Improvement Initiative (MQii). For reference, see this infographic from the Defeat Malnutrition Today Coalition.

1. The focus group call will provide the opportunity to discuss the following topics with your peers. What, if anything, would you like to improve in screening older adults for malnutrition?
2. When malnutrition in an older adult is identified and addressed on a plan of care in the hospital, what is the process for communicating nutrition care through the discharge process?
3. What, if anything, would you like to do to improve the transitions of care process regarding care for the malnourished older adult?
4. In your opinion, what would make community nutrition resources, such as congregate or home-delivered meals, food assistance programs or nutrition counseling by a dietitian, more a part of discharge planning?

Please forward this invitation to an individual involved in discharge planning from your facility. Their perspective on discharge planning is important.

Focus Group Invitation for Long-Term Care, Skilled Care and Rehabilitation RDNs

You are invited to join a group of your peers in a one-time focus group to discuss better integration of malnutrition care of older adults into care transitions with a focus on nursing facilities, rehab and skilled facilities. Carlene Russell is working with Meals on Wheels America on this malnutrition project and will facilitate the discussion to identify promising practices to better serve older adults in home and community-based settings. This project will build on efforts of “Defeat Malnutrition Today” and the “Malnutrition Quality Improvement Initiative” (MQii). For reference see this infographic from the Defeat Malnutrition Today Coalition.

The focus group call will provide the opportunity to discuss the following topics with your peers.

1. What nutrition screening, nutrition assessment and nutrition care plan information is available to you from prior care settings when an older adult is admitted to your facility from a hospital, medical provider, or home care agency?
2. What if anything, would you like to do to improve the transitions of care process regarding care for the malnourished older adult?
3. What, if anything, would you like to improve in screening older adults for malnutrition?
4. What successes or best practices have you implemented to identify malnutrition and integrate malnutrition care into care transitions?

5. In your opinion, what would make community nutrition resources, such as congregate or home-delivered meals and food assistance programs or nutrition counseling by a dietitian, more a part of discharge planning?

Focus Group Invitations for Ambulatory and Home Care RDNs

You are invited to join a group of your peers in a one-time focus group to discuss better integration of malnutrition care of older adults into care transitions, with a focus on home and community-based care. Carlene Russell is working with Meals on Wheels America and will facilitate the discussion to identify promising practices to better serve older adults as they transition to home and community-based settings. This project will build on efforts of “Defeat Malnutrition Today” and the “Malnutrition Quality Improvement Initiative” (MQii). For reference see this infographic from the Defeat Malnutrition Today Coalition.

The focus group call will provide the opportunity to discuss the following topics with your peers.

1. What nutrition screening, nutrition assessment and nutrition care plan information is available to you from prior care settings when an older adult is admitted to your agency from a hospital; skilled, rehab, or nursing facility; or medical provider?
2. What if anything, would you like to do to improve the transitions of care process regarding care for the malnourished older adult?
3. What, if anything, would you like to improve in screening older adults for malnutrition?
4. In your opinion, what would make community nutrition resources, such as congregate or home-delivered meals and food assistance programs or nutrition counseling by a dietitian, more a part of care for older adults at risk for or who are malnourished?

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