Avalere

MQii MALNUTRITION QUALITY IMPROVEMENT INITIATIVE

Addressing Nutrition-related Social Determinants of Health Through Malnutrition Identification and Care Coordination

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Problem Statement

The Centers for Disease Control (CDC) defines social determinants of health as the complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities.[1] As organizations seek opportunities to improve quality of care and individuals' health outcomes while reducing overall costs, they are exploring ways to address individuals' social determinants of health within the context of traditional care, service, and delivery models.[2]

Availability of resources to meet daily needs, including good nutrition, is considered critical to promote good health.[3] However, approximately 6-30% of individuals in the community at any given time are malnourished or at risk of malnutrition;[4,5] this number is even higher in the acute and post-acute care settings.[6,7]

Malnutrition is defined as a nutrition imbalance, including under-nutrition and over-nutrition, and is frequently present in individuals who are overweight or obese.[8,9] In turn, malnutrition can contribute to a cycle of poor health, including increased risk of chronic disease, frailty, falls, and loss of independence.[10, 11]

To date, standards of care, tools, and best practices to address malnutrition have not been systematically adopted across care settings, and coordination amongst medical and non-medical entities to manage individuals' nutrition needs have been limited. To address this social determinant of health, a limited number of healthcare and community-based providers are developing and testing innovative channels through which they can better identify and care for the nutrition needs of malnourished individuals and individuals at risk of malnutrition.

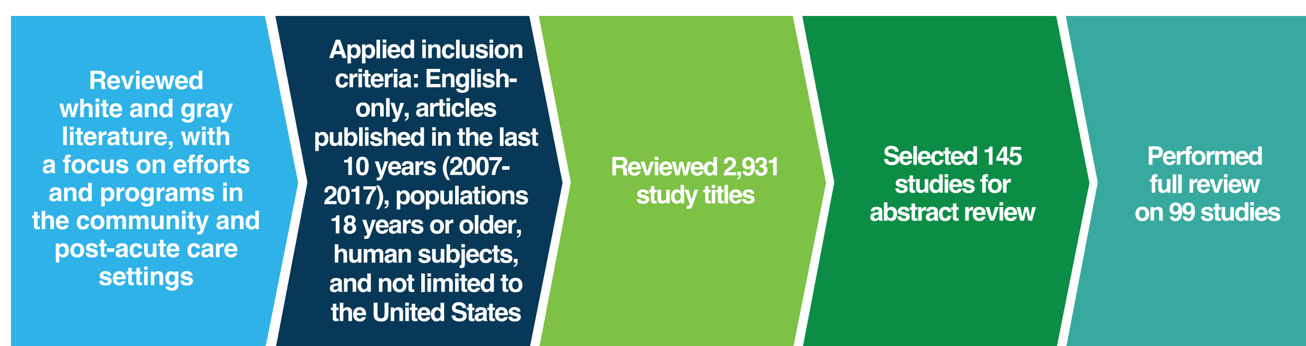
Aim Statement

Identify innovative models being introduced in the hospital, primary care, and community care settings to address nutrition-related social determinants of health through better delivery of high-quality, coordinated care for individuals who are malnourished or at risk of malnutrition and transitioning across different care settings, and outline shared learnings across models that can be scaled to other settings of care.

Approach

Recognizing the impact of malnutrition on individuals' ability to prevent disease, maintain their health, and heal from injury or illness, Avalere Health and the Academy of Nutrition and Dietetics sought to understand the state of current efforts to address this social determinant of health and opportunities to further improve it. We performed a targeted literature search of white and gray literature to evaluate efforts to address individuals' nutrition needs (Figure 1).

Figure 1. Literature Search Approach



We then used information in the grey literature to engage with three organizations who are leading innovative efforts to address individuals' nutrition needs across acute, post-acute, and community settings. We performed phone- and email-based interviews with each organization to understand the nature of their interventions, including the structure of the project team, tools or resources used, and the mechanism of nutrition support/care delivery and care coordination across settings. Finally, we sought to identify key themes and roles represented across each effort to inform potential opportunities to replicate and scale these efforts more broadly across the United States.

Limited Efforts to Address Individuals' Nutrition Needs Across Care Settings

Findings from the literature review support the provision of nutrition evaluation and treatment in community settings. They also highlight the need for malnutrition risk assessment and management as patients are transitioning between care settings (e.g., post-discharge to home or post-acute care) to improve patient outcomes (e.g., reduce mortality, improve function) and reduce adverse clinical events.[12]

While national initiatives exist to address malnutrition in the acute care setting, such as the Malnutrition Quality Improvement Initiative,[13] there are no quality improvement programs specifically focused on addressing malnutrition or malnutrition risk by improving nutrition care in the post-acute or community care setting. Programs that do exist have a broader focus, such as pre/post-operative nutrition, diabetes education, or efforts to improve lifestyle behaviors and activities (with nutrition as one component of the intervention) and have been found to have limited effectiveness and impact.

Three Models to Improve Care Coordination

Recognizing the limited efforts to date to identify, manage, and coordinate care for patients' nutrition needs across care settings, we sought to understand the key elements of three successful local models identified that are currently being implemented to enhance patients' nutrition and address their social determinants of health. Each of these approaches have the goal of helping the individual maintain good nutrition to support optimal health and, to the extent possible, avoid hospital admission (or readmission) or premature admission to a nursing home.

For each model, we evaluated how the organization provides screening and nutrition care; patient education and shared-decision making; and data infrastructure needs for communication and coordination. The figures below provide an overview of the approach (1) an acute care setting, the University of North Carolina (UNC) Medical Center, (2) a primary care group practice, and (3) a community support organization and payer partnership between Aetna and Meals on Wheels America, attempted to address individuals' nutrition needs.

Figure 2 reflects how the dietitians at the UNC Medical Center 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. UNC Medical Center is implementing this pilot across both its inpatient setting as well as its outpatient clinic.

Figure 2. Integration of Malnutrition Care into UNC Medical Center Discharge Process

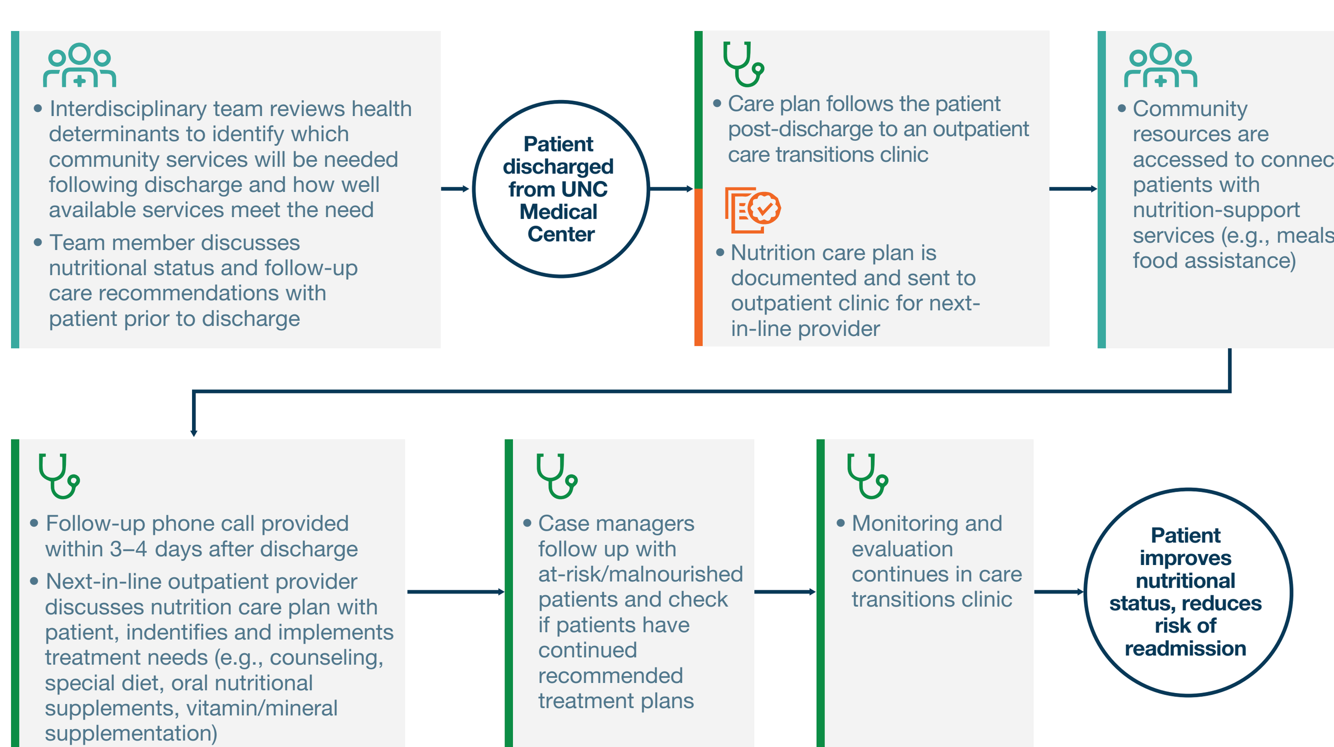


Figure 3 demonstrates how a primary care physician group is working to better identify and manage patients at risk of malnutrition through improved clinician training, patient education, referral to dietitians as needed, and the use of technology to identify patients prior to arrival and support patients while at the clinician's office and once they leave it.

Figure 3. Integration of Malnutrition Care into Primary Care Pathway

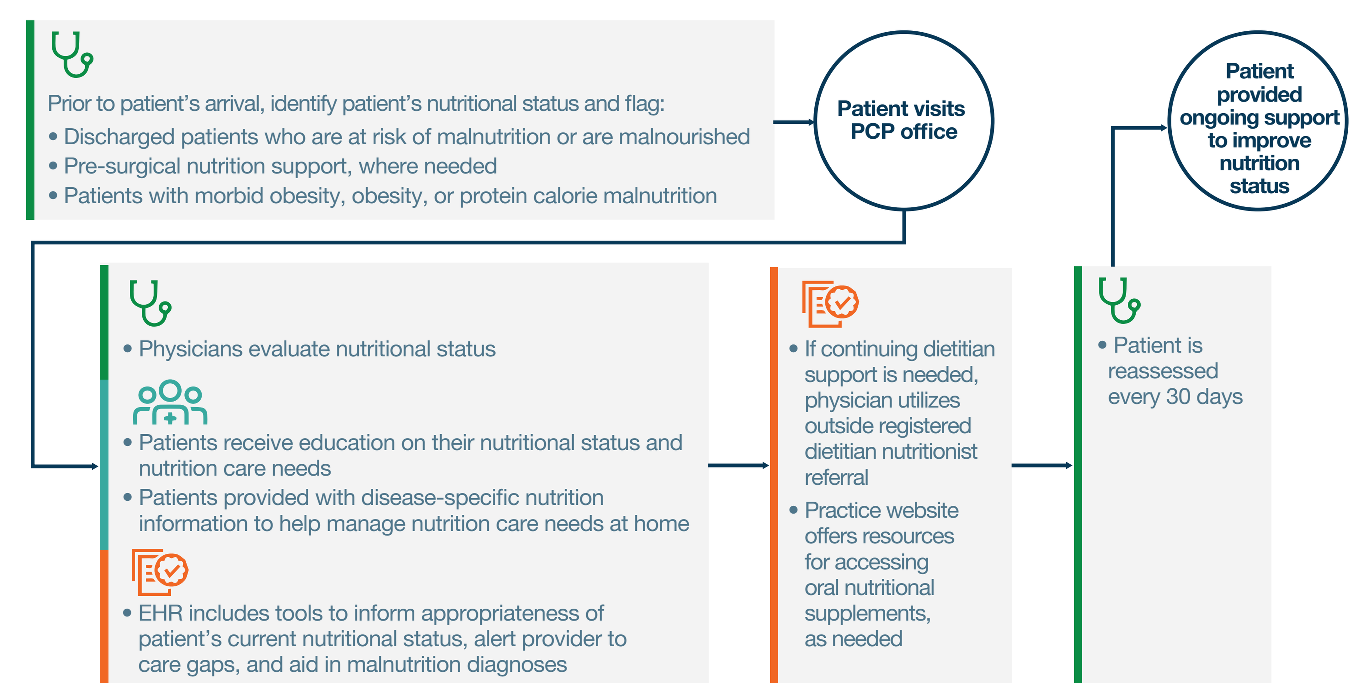
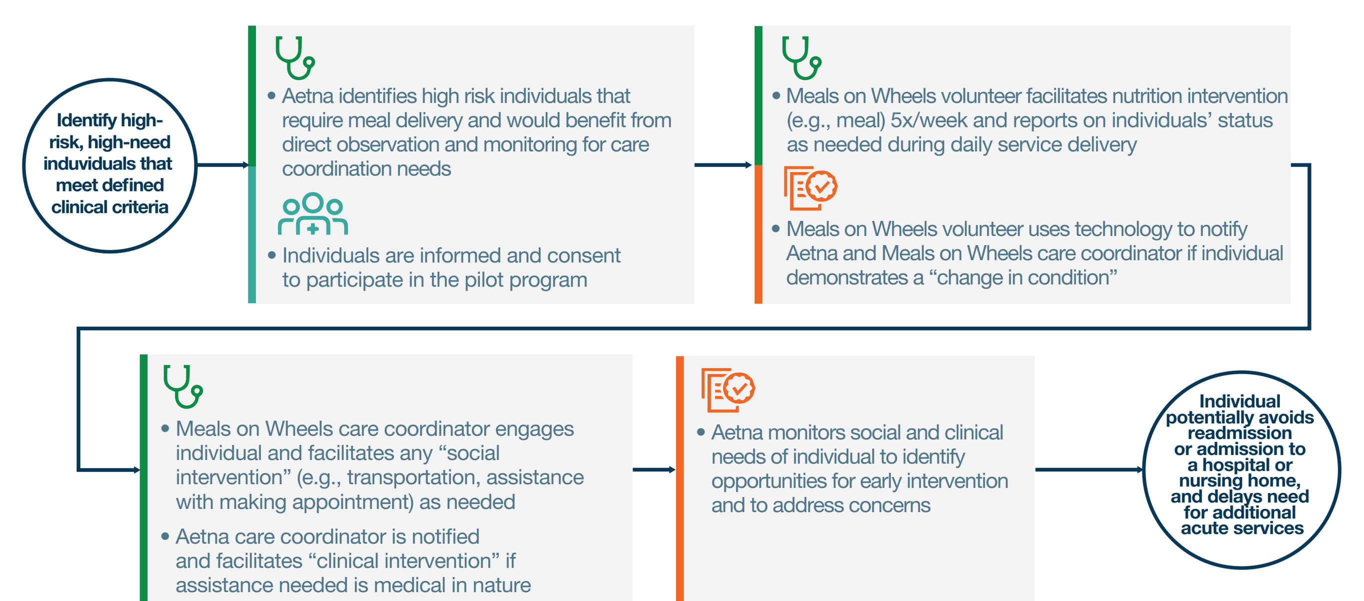


Figure 4 demonstrates how Aetna and Meals on Wheels America have partnered to conduct a pilot among high-risk community-dwelling individuals using volunteers, care coordinators, and technology to rapidly identify and intervene on potential medical or social concerns that could put an individual at risk of malnutrition and other health problems.

Figure 4. Integration of Nutrition and Social Services into Aetna-Meals on Wheels Care Coordination Model



Following review of each of these models, we sought to identify common elements that enable effective identification and management of individuals' nutrition needs to help the individual remain in the community setting. While the settings of care differ, each model shared similar core components (Figure 4).

Figure 5. Key Elements for Successful Models to Identify and Manage Individuals' Nutrition Needs

Conclusion: Scaling Models Intended to Address Malnutrition and Other Social Determinants of Health

Considering the increasing presentation of patients with lifestyle-related chronic disease and the growing focus on social determinants, it is anticipated that the demand on physicians, clinicians, and other community support organizations to explore innovative ways to offer nutrition care to patients will continue to increase in the future.[14]

The three models highlighted here have the potential to be scaled to other healthcare and community-based providers looking to address nutrition as a social determinant of health. Specifically, these three models present more targeted approaches to supporting care coordination and care transitions for malnourished patients that go beyond traditional nutrition counseling.

In-depth study of these models presents opportunities for healthcare organizations seeking to explore the scalability of addressing nutrition as a social determinant of health. First, effectively scaling these models will require flexibility and adaptability to meet the demographics and unique needs of the communities in which they will be implemented. Second, scaling such models may require enhanced partnerships within and across care settings and healthcare stakeholders. For example, payers collect robust claims data that can be merged with data from providers to implement models in a more targeted fashion and expand these approaches in different settings and across diverse populations. Moreover, multi-stakeholder partnerships can be leveraged to evaluate the impact of addressing the social determinants of health, including nutrition. As organizations consider how to best utilize traditional models of healthcare and community service delivery to address social determinants of health, a focus on partnering across care settings and stakeholders may elevate the overall effectiveness of such efforts.

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