



Impacting Malnutrition, Food Insecurity, and Health Equity: An Overview of Academy of Nutrition and Dietetics Priorities and Future Opportunities

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AN INHERENT CONNECTION exists between malnutrition, food insecurity, and health equity. Registered dietitian nutritionists (RDNs) are at the forefront of addressing these to impact better health outcomes for the overall population in various practice settings (eg, hospital, post-acute and long-term care, community). Identifying malnutrition helps flag those who are food insecure and conversely, identifying food insecurity may suggest the presence or risk of malnutrition.¹ The Academy of Nutrition and Dietetics (Academy) supports RDNs and nutrition and dietetic technicians, registered (NDTRs) by developing and providing tools, resources, and initiatives related to malnutrition, food insecurity, and health equity. Such resources include the use of valid and reliable screening tools that trigger referrals to an RDN² for nutrition assessment, care planning, and treatment interventions for patients in acute care, ambulatory, post-acute, and community-based points of care diagnosed as at nutrition risk, malnourished, and food insecure.

MALNUTRITION AND FOOD INSECURITY

Older adults age 65 years and older are at an increased risk for malnutrition because of factors such as physical changes, isolation, depression, and limited income.³ The prevalence of malnutrition in American older adults who reside in the community setting ranges from 1% to 25%; in the long-term care setting, in which approximately 4% of older adults reside, it is closer to 66.5%.³ Malnutrition (undernutrition) contributes to increased morbidity and mortality, lower quality of life, and increased hospital length of stay and health care costs.⁴ Food insecurity caused by economic burden increases the risk of malnutrition.^{5,6} Malnutrition is not distributed equally, and disproportionately burdens vulnerable populations.⁷ Data from the Malnutrition Quality Improvement Initiative (MQii) Learning Collaborative in 2019 indicate non-Hispanic Black individuals with malnutrition have more than a 26% readmission rate compared with less than 19% among non-Hispanic White individuals¹ (see [Figure 1](#)). Addressing malnutrition through the implementation of quality measures that include a nutrition care plan provided by an RDN can help reduce disparities in accessing healthy food and health care.¹

ACADEMY STRATEGIC PLAN AND CODE OF ETHICS

To support the work of its members and to help all credentialed nutrition and dietetics practitioners ensure equitable access to nutrition services for all patients and the public, the

Academy has demonstrated its dedication to addressing malnutrition, food insecurity, and health equity by incorporating them into its strategic plan.⁸ [Figure 2](#) outlines the principle, focus areas, and impact goals that include these three issues.

In addition to the Academy's strategic plan, the 2018 Academy/Commission on Dietetic Registration (CDR) Code of Ethics for the Nutrition and Dietetics Profession¹⁰ also promotes health equity in its principles and standards, including:

- 1 g. Act in a caring and respectful manner, mindful of individual differences, cultural, and ethnic diversity;
- 4 a. Collaborate with others to reduce health disparities and protect human rights; and
- 4 b. Promote fairness and objectivity with fair and equitable treatment.

The Code of Ethics reflects the values and ethical principles guiding the nutrition and dietetics profession and is intended to set forth commitments and obligations of Academy members and CDR credentialed nutrition and dietetics practitioners to the public, clients, the profession, colleagues, and other professionals. To support the Code of Ethics, the Academy releases Ethics in Practice articles in the *Journal of the Academy of Nutrition and Dietetics (Journal)*. The Ethics in Practice article "Social Determinants of Health: Enhancing Health Equity"¹¹ focuses on how the Academy recognizes the role of social determinants of health¹² when examining root causes of chronic diseases and

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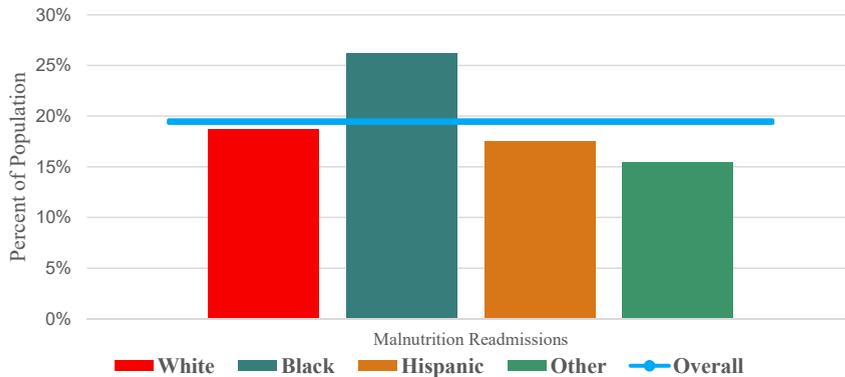


Figure 1. 2019 Hospital readmissions for patients with malnutrition as stratified by race/ethnicity. Used with permission from Avalere Health.

provides recommendations for addressing health disparities tied specifically to social determinants of health.

ACADEMY INITIATIVES, PROJECTS, AND RESOURCES

Malnutrition Quality Improvement Initiative

The MQii is a national nutrition focused quality improvement initiative. The MQii is a collaborative initiative between the Academy, Avalere Health and other stakeholders spanning from 2013 to the present. The MQii focuses on improving care and outcomes for hospitalized adults aged 65 years and older by providing a series of nutrition-focused resources that include the Global Malnutrition Composite Score (GMCS) electronic clinical quality measure (eCQM), national Learning Collaborative (includes opportunities for peer collaboration, research, and dissemination support), and an

interdisciplinary toolkit. The MQii is forward focusing and seeks to extend applications to patient care and outcomes in other populations and care settings.¹³

A set of four malnutrition-focused eCQMs were developed through a process of identifying gaps in malnutrition care.¹⁴ As the measures were tested by members of a Learning Collaborative, and evaluated by national bodies such as the National Quality Forum (NQF) and Centers for Medicare & Medicaid Services (CMS), CMS and NQF suggested combining the four eCQMs into a composite measure—resulting in the GMCS eCQM. CMS defines a composite measure as a performance measure representing a “combination of two or more component measures, each of which individually reflects quality care, into a single performance measure with a single score.”¹⁵ As the four eCQMs are independent, the components are interrelated moving process to outcomes, the composite measure offers

more comprehensive follow-through on best practices for patients at risk of malnutrition. The four components of the GMCS follow the nutrition care process and include:

1. Screening for malnutrition risk at admission;
2. Completion of a nutrition assessment for patients who screened positively for risk of malnutrition;
3. Appropriate documentation of malnutrition diagnosis in the patient’s medical record when this is indicated by the assessment findings; and
4. Development of a nutrition care plan (including the recommended treatment) for malnourished patients.¹⁴

This process begins with identification of risk of malnutrition for a more thorough assessment by an RDN. The RDN then works with the appropriate interdisciplinary team members in providing treatment recommendations to address the nutritional status and clinical indicators that inform a medical diagnosis of malnutrition documented by a physician.

The GMCS measure was included in the CMS 2020 Measures Under Consideration (MUC) List,¹⁶ published December 2020, as MUC20-0032. More recently, the GMCS measure was unanimously endorsed by NQF’s Consensus Standards Approval Committee in June 2021.¹⁷ Endorsement indicates a measure is “best in class” and brings the measure one step closer to CMS program adoption.¹⁸ The GMCS measure was included in the CMS Inpatient Prospective Payment Systems (IPPS) Final Rule for acute-care and long-term care hospitals for FY2023.¹⁹ CMS has adopted the GMCS eCQM as part of the Hospital Inpatient Quality Reporting (IQR) Program measure set for which hospitals can self-select, beginning with the CY2024 reporting period/FY2026 payment determination and for subsequent years.¹⁹

Another resource developed through the MQii is an interdisciplinary Toolkit.²⁰ The MQii Toolkit is an evidence-based guide that leads hospital providers through supporting older hospitalized patients’ quality malnutrition care, and its best practices and core concepts are relevant to all adult

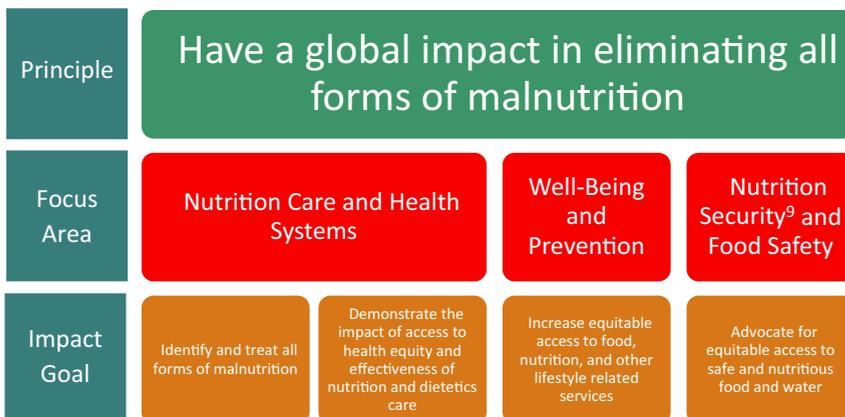


Figure 2. Components of Academy Strategic Plan related to malnutrition, food insecurity, and health equity.⁸

patients, even though the Toolkit is designed to facilitate care of patients ages 65 years and older.²¹ The MQii Toolkit provides interdisciplinary team members guidance for the various components of malnutrition care: screening, assessment, diagnosis, care plan development, monitoring and evaluation, and discharge planning.

The aforementioned MQii Learning Collaborative²² is a community of clinicians committed to improving delivery of malnutrition care in hospitals and health systems across the United States. The Learning Collaborative was established in 2016 and now spans more than 300 members among 39 states and territories. These health care institutions undertake a data-driven, patient-centered, malnutrition quality improvement project at their respective organizations using a best practices MQii Toolkit and track and monitor improvement with adoption and uptake of the malnutrition eQCMs.

Quality Management Resources

The Academy's Quality Management provides resources and tools to assist credentialed nutrition and dietetics practitioners in providing high-quality, equitable nutrition care and services. These include the Scope of Practice and Standards of Practice for RDNs and NDTRs.^{23,24} The Academy maintains the Definition of Terms List,¹² which serve as standardized language for consistent application in practice settings and Academy documents. The List contains the Diversity and Health Equity category and includes definitions for terms such as *culturally appropriate care*, *health disparities*, *health equity*, and *social determinants of health*. The terms and definitions are used in a variety of ways, including organization requirements, public policy development, regulations related to professional licensure, and as needed by academia, research, professional publications, employers, industry, and practitioners and members.

In addition, the Quality Strategy and Health Equity Guide²⁵ showcases major areas of the National Quality Strategy led by the Agency for Healthcare Research and Quality on behalf of the CMS Quality Action Plan and Social Determinants of Health tools and resources. The guide features a plethora of opportunities for RDN and NDTR

Resource	Link
Academy Action Center	https://www.eatrightpro.org/advocacy/take-action/action-center
Academy Foundation Future of Food Initiative	https://www.eatrightfoundation.org/foundation/resources/future-of-food
Clinical Malnutrition webpage	https://www.eatrightpro.org/practice/practice-resources/clinical-malnutrition
Food Security and Sustainability webpage	https://www.eatrightpro.org/practice/practice-resources/food-security-and-sustainability
IDEA (inclusion, diversity, equity, and access) Hub	https://www.eatrightpro.org/practice/practice-resources/diversity-and-inclusion

Figure 3. Additional Academy resources related to malnutrition, food insecurity, and health equity.

involvement. Another tool developed by the Academy's Quality Management are Practice Tips, which aid nutrition and dietetics practitioners in navigating their practice by providing resources and asking critical, thought-provoking questions. The "Practice Tips: Addressing Food and Nutrition Insecurity"²⁶ provides key steps and outlines a path for RDNs to seize the opportunity to be leaders in identifying food insecurity and malnutrition and subsequently providing intervening resources. The Practice Tip also contains information related to the implementation of the Improvement Activity, "Implement Food Insecurity and Nutrition Risk Identification and Treatment Protocols," for providers eligible to participate in the Merit-Based Incentive Payment System program.²⁷

Additional Academy Webpages and Initiatives

In addition to Quality Management resources and the MQii, the Academy dedicates other resources and initiatives to support credentialed nutrition and dietetics practitioner knowledge, skills, and advancement in topics related to malnutrition, food insecurity, and health equity (see Figure 3). The Clinical Malnutrition webpage²⁸ houses information on the MQii, malnutrition resources from the Academy *Journal* collections, Evidence Analysis Library, and Nutrition Care Manuals, in addition to links for malnutrition resources from organizations such as the American Society for Parenteral

and Enteral Nutrition and Defeat Malnutrition Today.

The Academy established an IDEA (inclusion, diversity, equity, and access) Hub²⁹ that outlines the IDEA Action Plan (a sustainable, living document designed to move the dietetics profession toward an increasingly welcome and inclusive future), spotlights projects from various organizational units and affiliates, and offers IDEA-related Academy resources (eg, publications, videos, webinars, scholarships, and grants). These resources include links to Member Interest Groups, *Journal* articles such as "Advancing Equity: The Academy's Commitment to Supporting Inclusion, Diversity, Equity, and Access,"³⁰ IDEA awards and grants, and videos and webinars from other organizations.

The Food Security and Sustainability webpage³¹ provides RDNs and NDTRs with information and tools to address food insecurity and sustainability in the populations they serve. Resources described on this page include continuing professional education opportunities and the Future of Food Initiative, which began in 2012 as a joint project between the Academy Foundation, Feeding America, and National Dairy Council to help raise awareness of food insecurity as a public health issue. The Future of Food Initiative³² includes curricula for dietetic interns, a toolkit, fact sheets, infographics, and webinars. The Food Security and Sustainability webpage also describes the principles of a healthy, sustainable food system and gives a list of additional resources from entities such as UNICEF and the World Health Organization. Other resources

related to food insecurity include *Journal* articles such as the “Position of the Academy of Nutrition and Dietetics: Food Insecurity in the United States.”⁵

Credentialed nutrition and dietetics practitioners also can access information related to participating in malnutrition, food insecurity, or health equity policy and advocacy issues in the Academy Action Center.³³ Action alerts bring the Academy’s policy issues to the attention of members of Congress and help to raise awareness and add legitimacy to a particular priority issue. Action Alert examples include supporting the Health Equity and Accountability Act and expanding Medicare medical nutrition therapy coverage.

Highlighting Interprofessional Organizations Initiatives

The Academy highlights similar efforts from interprofessional organizations by linking to their resources on eatrightpro.org. In addition to sharing their resources and initiatives, the Academy also collaborates with other organizations on Joint Position or Consensus Papers. One such example is the July 2019 Joint Position Paper by the Academy and the Society for Nutrition Education and Behavior on “Food and Nutrition Programs for Community-Residing Older Adults.”³⁴ This article outlined the joint need to address issues such as food insecurity and malnutrition in the older adult population. The Academy also shares health equity resources from the American Medical Association and the Centers for Disease Control and Prevention.²⁹

SUMMARY

RDNs and NDTRs are committed to protecting patients, clients, the public, and the profession of nutrition and dietetics,⁴ with the aim of transforming care and achieving health equity. RDNs consistently engage in executing nutrition care services for patients at nutrition risk, with malnutrition, and who are food insecure. By continuously implementing key performance indicators and supporting expert-level standards of practice,²⁴ RDNs are realizing their patients’ and clients’ significant improvement and advancement in clinical and economic outcomes across all patient populations. The

Academy supports RDNs and NDTRs by developing and providing the outlined tools, resources, and initiatives related to malnutrition, food insecurity and health equity.

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STATEMENT OF POTENTIAL CONFLICT OF INTEREST

The Malnutrition Quality Improvement Initiative (MQii) is a project of the Academy of Nutrition and Dietetics, Avalere Health, and other stakeholders who participated in and provided guidance and expertise in this collaborative partnership. D. Buelsing Sowards is an employee of the Academy of Nutrition and Dietetics. S. McCauley is an employee of the Academy of Nutrition and Dietetics. N. Munoz is an employee of the VA Healthcare System.

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AUTHOR CONTRIBUTIONS

D. Buelsing Sowards drafted the outline and manuscript. S. McCauley reviewed and contributed to the outline. All coauthors reviewed, contributed to, and commented on subsequent drafts of the manuscript.