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# Healthcare Nutrition Council

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December 11, 2016

Andrew Slavitt  
Acting Administrator  
Centers for Medicare & Medicaid Services  
Department of Health and Human Services  
Attention: CMS-1632-P  
Mail Stop C4-26-05  
7500 Security Boulevard  
Baltimore, MD 21244-1850

**RE: Quality Measure Development to satisfy the Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT Act) domain of: Transfer of Health Information and Care Preferences When an Individual Transitions**

Dear Acting Administrator Slavitt:

The Healthcare Nutrition Council (HNC), representing manufacturers of enteral nutrition formulas, parenteral nutritional formulas, supplies and equipment, submits these comments on Quality Measure Development to satisfy the Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT Act) domain of: Transfer of Health Information and Care Preferences When an Individual Transitions. Our primary recommendation to CMS can be summarized as follows:

1. *HNC supports the proposed transfer of health information measure concepts*
  - a. *Transfer of information occurring at PAC admission, start of care or resumption of care*
  - b. *Transfer of information occurring at PAC discharge or transfer*
2. *We commend CMS for acknowledging the importance of nutrition in patient recovery and health status by including nutrition in “Types of Health Information” received a Admission or provided upon Discharge. We urge CMS to consider revising the current language in “Types of Health Information” for each measure to include the following:*
  - a. *Special services, treatments, or interventions; i.e., ventilator support, dialysis, IV fluids, parenteral **or enteral nutrition, blood product use.***
  - b. *Diet/Nutrition **Orders including therapeutic nutrition***
3. *We also recommend CMS include the patient’s nutritional status in transfer of information; i.e., diagnosis or last nutrition assessment. We urge CMS to consider revising the current language in “Types of Health Information” for each measure to include the following:*
  - a. *Medical conditions and co-morbidities (e.g., pressure injuries and skin status, **nutritional status, and pain.***

*Because of nutrition’s vital role in patient care, HNC believes that collecting and providing information about nutrition and nutrition interventions when a patient transitions between*

*healthcare providers is essential and will lead to fewer and shorter hospitalizations/rehospitalizations, better overall patient health particularly during an important transitional period, and better patient outcomes. In particular, patient setbacks resulting from transition to post-acute care can be mitigated by proper nutrition and the continuation of therapeutic nutrition when indicated.*

It is widely recognized that nutritional status plays a significant role in health outcomes and healthcare costs. Malnutrition generally is defined as “an acute, subacute or chronic state of nutrition, in which varying degrees of over nutrition or undernutrition with or without inflammatory activity have led to a change in body composition and diminished function.”<sup>i</sup>

**Malnutrition has also been defined as a state of nutrition in which a deficiency, excess, or imbalance of energy, protein, and other nutrients cause measurable adverse effects on body function and clinical outcomes.**<sup>ii</sup> There are three common types of malnutrition diagnoses for adults in clinical practice settings: (1) starvation-related malnutrition; (2) chronic disease-related malnutrition; and (3) acute disease or injury-related malnutrition.<sup>iii</sup>

In these comments, we refer to chronic disease-related malnutrition, acute disease or injury-related malnutrition as well as generically as disease-related malnutrition. Disease-related malnutrition can have similar distinct nutrient requirements altered across all spectrums of body mass index, ranging from under to overweight individuals.

For over 30 years, large-scale studies have shown that as many as half of hospitalized patients and 35% to 85% of older long-term care residents are undernourished.<sup>iv,v,vi,vii,viii,ix,x</sup> Significantly, patients’ nutritional status often is not evaluated or diagnosed in a timely manner despite the common occurrence and clinical relevance of malnutrition. In a recent study conducted by the Agency for Healthcare Research and Quality using the Healthcare Cost and Utilization Project database, only about 7 percent of hospitalized patients are diagnosed with malnutrition.<sup>xi</sup> With as many as half of hospitalized patients and 35 to 85% of older long-term care residents undernourished, the extremely low number of diagnosis for malnutrition represents a diagnosis and gap that needs to be addressed. Given the prevalence of malnutrition among individuals in long-term care settings or those transitioning into post-acute care, it remains essential that information about a patient’s nutritional status and diet orders including any information on prescribed use of therapeutic nutrition be collected and transmitted during care transition.

Furthermore, given low diagnosis rates of malnutrition in many patients, it would be beneficial for information on the last or frequency of any previous nutrition assessments also be provided. Such information will allow the new facility to better assess whether the patient may need initial or additional nutrition screening to determine whether they may be malnourished and/or could benefit from a specialized diet or some kind of nutrition intervention. Given the potential for patients to become malnourished as a result of certain disease states and/or hospital procedures, this is particularly important in the context of transition from post-acute care.

As noted, malnutrition often is associated with acute and chronic diseases and injury, such as cancer, stroke, chronic obstructive pulmonary disease, heart failure, infection, trauma and surgical procedures. These diseases and conditions may cause an individual to become malnourished with malassimilation and/or inappropriate provision of nutrients. Overall patient care and outcomes are affected by nutrition care management, which includes timely diagnosis

and application of appropriate treatment of malnutrition. Key measurable outcomes that can be positively affected by appropriate nutrition intervention, such as oral nutrition supplements, enteral or parenteral nutrition, include the following:

- **Morbidity, Complications and Mortality:** Malnourished patients are more likely to experience complications, such as pneumonia,<sup>xii</sup> pressure ulcers,<sup>xiii</sup> nosocomial infections,<sup>xiv</sup> and death.<sup>xv, xvi</sup> In addition, malnutrition is a risk factor for other severe clinical events, such as falls<sup>xvii</sup> and worse outcomes after surgery or trauma.<sup>xviii</sup> Malnutrition has a negative impact on patients with specific chronic diseases and conditions, such as stroke patients,<sup>xix, xx</sup> and patients with heart failure,<sup>xxi</sup> cancer,<sup>xxii, xxiii</sup> or COPD.<sup>xxiv</sup>
- **Length of Stay:** Malnourished patients, as well as patients at risk for malnutrition, have significantly longer hospitalizations than well-nourished patients and patients not at risk for malnutrition.<sup>xxv, xxvi, xxvii</sup>
- **Readmission, Institutionalization and Ongoing Services:** Disease-related malnutrition is a common reason for patients to be readmitted to hospitals.<sup>xxviii</sup> One recent study found that malnourished patients with heart failure were 36 percent more likely to be readmitted to the hospital within 30 days than nourished patients with heart failure.<sup>xxix</sup> Additionally, hospitalized patients at risk of malnutrition are more likely to be discharged to another facility or require ongoing healthcare services after being discharged from the hospital than patients who are not at risk for malnutrition.<sup>xxx, xxxi</sup> A recent retrospective health economic study found that providing oral nutritional supplements to Medicare patients aged 65+ with any primary diagnosis was associated with a 16% reduction in length of stay and a 15.8% cost savings – an average of \$3,079 -- per episode.<sup>xxxii</sup>
- **Health Care Costs:** Disease-related malnutrition, particularly when not diagnosed and treated, increases the cost of care due to the factors described above: increased morbidity, complications and mortality, longer hospitalizations, and more readmissions, continued institutionalizations and ongoing health care services.
  - **A 2014 study estimates that the annual burden of disease-related malnutrition for older adults aged 65 years and older across eight diseases was \$51.3 billion.**<sup>xxxiii</sup> **The authors hypothesize that their findings likely underestimate the total burden of disease-related malnutrition since its rates are much higher in hospitalized patients.**<sup>xxxiv</sup> The cost impact of untreated malnutrition is illustrated below:
  - **Costs Related to Increased Morbidity and Complications:** High-risk malnourished patients are 2.1 times more likely to develop pressure ulcers than well-nourished patients.<sup>xxxv</sup> One study cited the average cost for hospital treatment of a stage IV pressure ulcer acquired in the hospital (including the treatment of associated medical complications) to be \$129,248. The average cost of hospital treatment of a stage IV pressure ulcer acquired in the community (including the treatment of associated medical complications) was \$124,327.<sup>xxxvi</sup>
  - **Costs Related to Hospitalizations:** Hospitalized malnourished patients, patients at risk for disease-related malnutrition and patients who experience declines in their nutritional status while hospitalized have higher health care costs than well-nourished patients, patients not at risk for malnutrition, and patients who remain properly nourished during their hospitalizations, respectively.<sup>xxxvii, xxxviii, xxxix</sup>

Patients frequently experience declines in their nutritional status while hospitalized.

- **Costs Related to Readmissions:** Malnourished patients and patients with nutrition related or metabolic issues are frequently readmitted to the hospital.<sup>xi, xli</sup> Studies have demonstrated that readmissions are 24-55% more costly than initial admissions and account for 25 percent of Medicare expenditures.<sup>xlii</sup> One study found that there were 11,855,702 Medicare fee-for-service patients discharged from hospitals between October 1, 2003 and September 30, 2004 who were at risk for rehospitalization; 19.6 percent of the patients were readmitted within 30 days, resulting in a cost of \$17.4 billion.<sup>xliii</sup>

Timely, appropriate clinical nutrition therapies can improve or maintain patients' nutritional status, and result in less morbidity and fewer complications, shorter hospital stays, fewer hospitalizations, reduced hospital readmissions and savings. It is for these reasons that CMS must continue to ensure that information about a patient's nutrition status and nutrition interventions are communicated during care transitions. For example, oral nutritional supplements (ONS) for hospitalized patients are associated with reductions in hospital lengths of stay, admission rates and costs.<sup>xliv</sup> Specialized nutritional products designed to meet the unique nutritional needs of major surgery patients with distinct nutrient ingredients have been proven to significantly reduce post-operative infectious complications which include nosocomial pneumonia, surgical site infections, anastomotic leaks, and urinary tract infections.<sup>xlvi, xlv</sup>

Similar to ONS, early usage of parenteral nutrition products in combination with enteral nutrition products or when enterals alone are not feasible also results in many of the beneficial patient outcomes noted above. For example, the early administration of combined parenteral and enteral nutrition has been shown to decrease ICU stays and decreases in nosocomial infections, antibiotic use, and lead to shorter duration of mechanical ventilation.<sup>xlvi, xlvii</sup> Other recent research has shown no significant difference in 30 and 60 day mortality or infection rates associated with the route of delivery, either parenteral or enteral, of early nutritional support in critically ill adults.<sup>xlix 1</sup> Regardless of the route of delivery, the research clearly shows that early diagnosis and effective treatment of malnutrition can improve patient outcomes, reduce morbidity and lower overall costs of care.

Whether ONS or parenteral, the demonstrated benefits of these nutrition interventions can only be realized after a transition if the patient continues to receive the indicated treatment. Thus, it is vital that information about the patient's nutritional status and diet orders including use of therapeutic nutrition products and the last nutrition assessment be provided in a transition so that the patient can continue to receive the appropriate care through the transition process. We urge CMS to take action on the health and economic impact of disease-related malnutrition to help achieve our shared goals of "Better Care, Smarter Spending and Healthier People." This is particularly important in the context of beneficiaries transitioning in and out of post-acute care, since their conditions can be complex and delicate. Good nutrition care can help decrease disability which is critical for older adults to remain independent and in their own homes.

In 1974, a seminal paper was published that identified several factors that contribute to malnutrition such as: lack of awareness of increased nutritional needs for injury/illness and the

role of nutrition in infection; not prioritizing nutrition for surgical patients; gaps in communication between clinical teams and physicians; and delayed nutrition intervention.<sup>li</sup>

These issues are still relevant in our current healthcare delivery system, including those transitioning in and out of post-acute care and may adversely affect timely diagnosis, patient care, outcomes, and healthcare costs. However, screening patients for malnutrition, providing follow-up assessments when indicated, documenting the medical diagnosis in the electronic medical record, transferring this information during a transition of care, and furnishing appropriate nutrition interventions can be cost-effective, improve patient care and outcomes. Documenting this information and ensuring that it is transmitted during a care transition will help to ensure patients receive consistent care through a transition lessening the potential for rehospitalization and increasing the quality of care.

The Academy of Nutrition and Dietetics and the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) has published a consensus statement that provides an overview of the general characteristics used to diagnose malnutrition and strategies to implement these criteria as part of a comprehensive malnutrition program.<sup>lii</sup> Detecting risk factors and accurately diagnosing malnutrition can be done easily by routinely screening patients in all settings for malnutrition and providing patients with timely, follow-up assessments, if needed. Once a diagnosis is determined, and if further nutritional intervention is indicated, then providing patients with appropriate nutrition therapies, including oral nutrition supplements, enteral or parenteral nutrition, and nutrition-related services in a timely manner can improve or maintain patients' nutritional status. As a result of detecting, preventing, diagnosing, and treating disease-related malnutrition, individuals will experience less morbidity and fewer complications, shorter hospital stays, and fewer hospitalizations and hospital readmissions. Quality of life indicators, such as increased or sustained mobility, will also increase.

HNC commends CMS for recognizing the importance of evaluating and maintaining patients' nutritional status, such as the recent inclusion of malnutrition electronic clinical quality measures on the Measures Under Consideration list for the Hospital Inpatient Quality Reporting Program and authorization for dietitians to write therapeutic diet orders for hospitalized patients.<sup>liii</sup> HNC encourages CMS to continue pursuing policies that promote identifying, preventing, diagnosing, and treating disease-related malnutrition in a timely manner. We believe this project offers another opportunity for CMS to prioritize collection and transmission of information about an individual's nutrition status throughout the continuum of care.

As such, HNC urges that CMS ensure that malnourished patients or those identified as at risk for development of the condition, including those transitioning in and out of post-acute care, be identified and furnished with timely, clinically indicated nutritional treatments. This includes maintaining and expanding information that is required to be transmitted to the new care setting on diet/nutrition, any therapeutic nutrition interventions, and any information on last nutrition screening when a patient transitions. Overall, HNC recommends CMS adopt quality measures and other policies to encourage timely and coordinated nutrition screening, assessment, diagnosis, and appropriate nutrition interventions across all care settings. HNC suggests that CMS incorporate such measures into a future quality programs soon as feasible; i.e. Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Long-Term Care Hospital Quality Reporting, Inpatient Rehabilitation Facility Quality Reporting, Nursing Home

(NH)/Skilled Nursing Facility Quality Reporting, Home Health Quality Reporting (HH QRP) and other appropriate initiatives.

Thank you for the opportunity to comment on this project. If you have any questions or would like additional information, please contact me at [ngardner@kellencompany.com](mailto:ngardner@kellencompany.com) or 202-207-1116.

Sincerely,

A handwritten signature in black ink on a light yellow background. The signature is cursive and appears to read 'Nicholas M. Gardner'.

Nicholas M. Gardner  
Executive Director  
Healthcare Nutrition Council

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<sup>i</sup> American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Board of Directors and Clinical Practice Committee. Definition of terms, style, and conventions used in A.S.P.E.N. Board of Directors–approved documents. American Society for Parenteral and Enteral Nutrition. [http://www.nutritioncare.org/Professional\\_Resources/Guidelines\\_and\\_Standards/Guidelines/2012\\_Definitions\\_of\\_Terms,\\_Style,\\_and\\_Conventions\\_Used\\_in\\_A\\_S\\_P\\_E\\_N\\_\\_Board\\_of\\_Directors-Approved\\_Documents](http://www.nutritioncare.org/Professional_Resources/Guidelines_and_Standards/Guidelines/2012_Definitions_of_Terms,_Style,_and_Conventions_Used_in_A_S_P_E_N__Board_of_Directors-Approved_Documents). Published May 2012. Accessed April 9, 2014.

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