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# Coding for Malnutrition in the Adult Patient: What the Physician Needs to Know



Wendy Phillips

**At least half of all hospitalized patients are malnourished, which increases the duration of recovery, length of stay, as well as the resources spent to treat the patient. Reimbursement to cover the additional costs may only be realized if the malnutrition is identified, diagnosed, and treated by the physician while providing care for the primary illness. This article will discuss the importance of identifying and documenting malnutrition in hospitalized patients, with practical tips for licensed independent practitioners to aid in this documentation.**

## INTRODUCTION

**O**ver 50% of hospitalized patients are malnourished upon admission.<sup>1</sup> These nutrition deficits can lead to muscle loss/weakness and, in turn, influence the risk for falls, pressure ulcers, infections, delay in wound healing, and increased hospital readmission rates.<sup>1</sup> Malnutrition as a co-morbidity also increases the duration of recovery from the primary illness and, in turn, the length of stay. Finally, it not only adds to time in rehabilitation, but also increases the need for rehab after hospitalization.<sup>2</sup>

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Not only is this unfortunate for our patients, but hospital costs soar. Given the added cost to care for these patients, it is important to capture reimbursement for this added co-morbidity from the insurance provider. Reimbursement may only be increased to cover these costs if the malnutrition is identified, diagnosed, and treated by the physician in combination with providing care for the primary illness. It is imperative that clinicians understand the criteria needed to identify and document malnutrition in order to maximize nutrition interventions to ensure best outcomes, and also capture reimbursement for the additional care provided. The goal of this article is to help clinicians identify and document malnutrition in hospitalized patients.

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The inpatient prospective payment system through the Centers for Medicare and Medicaid Services (CMS) established Medicare Severity-Diagnostic Related Groups (MS-DRGs).<sup>2</sup> Using this system, patients with

the same diagnosis and similar clinical characteristics are assigned to an MS-DRG and the hospital receives a fixed payment amount based on the average cost of care for patients in that group. In addition to the

**Table 1. ICD-9 and ICD-10 Codes for Malnutrition, available at [www.cms.gov/icd10](http://www.cms.gov/icd10)**

ICD-9 Code	ICD-10 Code	ICD-9 Title	ICD-10 Title	Criteria/Description	MCC/CC
260	E40	Kwashiorkor <i>should rarely be used in the U.S.</i>	Kwashiorkor <i>should rarely be used in the U.S.</i>	Nutritional edema with dyspigmentation of skin and hair	MCC
260	E42	Kwashiorkor <i>should rarely be used in the U.S.</i>	Marasmic kwashiorkor <i>should rarely be used in the U.S.</i>		
261	E41	Nutritional marasmus <i>should rarely be used in the U.S.</i>	Nutritional marasmus <i>should rarely be used in the U.S.</i>	Nutritional atrophy; severe malnutrition otherwise stated; severe energy deficiency	MCC
262	E43	Other severe protein-calorie malnutrition	Unspecified severe protein-calorie malnutrition	Nutritional edema without mention of dyspigmentation of skin and hair.	MCC
263	E44	Malnutrition of moderate degree	Moderate protein-calorie malnutrition	No definition given	CC
263.1	E44.1	Malnutrition of mild degree	Mild protein-calorie malnutrition	No definition given	CC
263.2	E45	Arrested development following protein-calorie malnutrition	Retarded development following protein-calorie malnutrition		CC
263.8	E46	Other protein-calorie malnutrition	Unspecified protein-calorie malnutrition	See below	CC
263.9	E46	Unspecified protein-calorie malnutrition	Unspecified protein-calorie malnutrition	A disorder caused by a lack of proper nutrition or an inability to absorb nutrients from food. An imbalanced nutritional status resulted from insufficient intake of nutrients to meet normal physiological requirement. Inadequate nutrition resulting from poor diet, malabsorption, or abnormal nutrient distribution. The lack of sufficient energy or protein to meet the body's metabolic demands, as a result of either an inadequate dietary intake of protein, intake of poor quality dietary protein, increased demands due to disease, or increased nutrient losses.	CC
263.9	E64	Unspecified protein-calorie malnutrition	Sequelae of protein-calorie malnutrition		CC

principal diagnosis that necessitated the hospital stay, the patient may have additional conditions that increase the resources needed to care for him/her. These are known as either *major* complications or comorbidities (MCCs), or complications or comorbidities (CCs). The hospital receives a higher reimbursement for MS-DRGs associated with a CC, and an even higher reimbursement for MS-DRGs associated with MCCs. This same system is used to determine the Case Mix Index, which is a description of the level of severity of patients being cared for at that hospital. The International Classification of Disease, 9th Revision (ICD-9) codes translate medical diagnoses into numerical codes for billing and research purposes. Malnutrition is a qualifying diagnosis in the MS-DRG system, but several different ICD-9 codes can be used for the varying degrees of malnutrition. Table 1 provides an overview of these codes, with an indication of which ones are considered by CMS as Major Complications or Comorbidities (MCCs) or Complications or Comorbidities (CCs). **Note:** Since the United States will be transitioning to the 10<sup>th</sup> edition of the ICD codes in 2015; both ICD-9 and the equivalent ICD-10 codes are listed in Table 1.

### Defining Malnutrition

While it is known that malnutrition results from inadequate nutrients, there is no universally accepted definition for malnutrition, or set of signs and symptoms for classifying the degree of malnutrition. Therefore, hospitals need to develop their own definitions of malnutrition based on evidence-based guidelines, professional practice, and the basic descriptions in ICD-9 codes (see Table 1).

Due to the lack of a universal definition for malnutrition, an International Consensus Guideline Committee was formed in 2009 to define malnutrition using an etiology based approach.<sup>1</sup> Although CMS has not accepted this classification system, they have not accepted any other classifications or definitions for malnutrition either. Therefore, this system can be adopted by the hospital. A patient's body mass index (BMI) may also be used to determine the degree of

malnutrition, as defined by the Center for Disease Control and Prevention (see Table 2). Since the etiology of malnutrition is often multifactorial, more than one assessment criteria should be considered when determining the degree of malnutrition, including an evaluation of dietary intake by the registered dietitian (RD). However, only one assessment parameter is required to determine the degree of malnutrition for the purpose of reimbursement. Regardless of the classification system used, a policy needs to be created for defining malnutrition at each hospital. This policy should be used consistently amongst all disciplines for determining the degree of malnutrition for each patient who is admitted. Table 3 is an example policy that may be customized for use at a hospital.

### Identifying and Treating Malnourished Patients

Patients who are screened by nursing as being at risk for malnutrition through the admission screening process should be referred promptly to the RD for a thorough nutrition assessment and classification of degree of malnutrition. Patients identified by other methods or clinicians as being malnourished, or at risk for malnutrition, should also be referred to the RD for further assessment. The RD will then implement a nutrition care plan for each patient with appropriate interventions to treat the malnutrition in conjunction with the medical care plan as determined by the physician. The RD will follow up on the response to the nutrition care provided during the hospital stay, and help to coordinate nutrition care after discharge, with the goal of preventing readmission for nutrition-related reasons.

The RD will document the nutrition assessment and diagnosis as it relates to the patient's degree of malnutrition. Additional nutrition diagnoses may also be documented, addressing problems such as inadequate intake, vitamin and mineral deficiencies, or other nutrition-related issues. For each nutrition diagnosis, the RD will document the associated planned recommendations for nutrition intervention, as well as the patient's goal/s, monitoring, and re-evaluation plan.

**Table 2. Classification of 'Underweight' Using BMI Categories from CDC<sup>4</sup>**

Lower than Recommended Weight Levels	Body Mass Index (mg/kg <sup>2</sup> )
Adult	< 18.5
Older Adults (> 65 years)	< 22

**Table 3. Example of Malnutrition Diagnosis Policy**

<p><b>POLICY</b></p> <ul style="list-style-type: none"> <li>• The Registered Dietitian (RD) may alert the Licensed Independent Practitioner (LIP) responsible for a patient’s care when the patient meets hospital approved criteria for Malnutrition and may help facilitate proper documentation and intervention.</li> <li>• Registered Dietitians will assess the degree of malnutrition for inpatients and document the “nutrition diagnosis” in Epic as part of their progress notes.</li> </ul>
<p><b>PROCEDURES</b></p> <p><b>Dietitian</b></p> <ul style="list-style-type: none"> <li>• Assesses the patient for malnutrition using the following guidelines*:</li> </ul>
<p><b>Severe Protein Calorie Malnutrition (&gt;2 of the following characteristics)</b></p> <ul style="list-style-type: none"> <li>• Obvious significant muscle wasting, loss of subcutaneous fat.</li> <li>• Nutritional intake of &lt; 50% of recommended intake for 2 weeks or more (as assessed by dietitian).</li> <li>• Bedridden or otherwise significantly reduced functional capacity.</li> <li>• Weight loss of &gt; 2% in 1 week, 5% in 1 month, or 7.5% in 3 months.</li> </ul>
<p><b>Malnutrition of a Moderate Degree (&gt;2 of the following characteristics)</b></p> <ul style="list-style-type: none"> <li>• Some muscle wasting, loss of subcutaneous fat.</li> <li>• Nutritional intake of &lt; 50% of recommended intake for 1 week (as assessed by a dietitian).</li> <li>• Reduced functional capacity.</li> <li>• Weight loss of &gt;1-2% in 1 week, 5% in 1 month, 7.5% in 3 months.</li> </ul>
<p><b>Mild Malnutrition</b></p> <ul style="list-style-type: none"> <li>• Food intake &lt; 50-75% of normal in the preceding week.</li> <li>• Weight loss less than that listed for Malnutrition of a Moderate Degree.</li> </ul>
<p>*In addition to using these criteria, the registered dietitian/nutritionist uses his/her professional clinical judgment in determining degree of malnutrition.</p>
<p><b>Coding Department</b></p> <ul style="list-style-type: none"> <li>• If an LIP has not already diagnosed the patient as malnourished, the coder reviews RD notes for degree of malnutrition. If the RD indicates the patient is malnourished, the coder notifies LIP with the request to document the degree of malnutrition (mild, moderate or severe).</li> </ul>

Once the RD has documented the degree of malnutrition as part of the nutrition diagnosis, the physician responsible for the care of the patient is notified (by a predetermined plan) of this diagnosis and the planned interventions or recommendations. Some examples of notification systems may include flagging of a progress note in the electronic medical record, text paging the physician or other licensed independent practitioner (LIP) with the patient specific information, discussion of the patient on medical rounds, or other methods of communication.

Historically, CMS regulations were in place in

the “Conditions of Participation” for hospitals that necessitated all nutrition interventions be ordered in the medical record by the physician responsible for the care of the patient. Since July 2014, these CMS regulations include RDs as authorized providers to write nutrition related orders for therapeutic diets, whether administered orally, enterally (tube feeding), or parenterally (total parenteral nutrition). However, some states and/or hospitals have not adopted policies allowing this level of care as of yet. Therefore, some physicians or other licensed health care practitioners

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may need to respond to RD requests to order nutrition interventions to treat the malnutrition identified.

**Capturing the Malnutrition Diagnosis for MS-DRGs**

As the RD is the expert in nutritional assessment, he/she should document the nutrition assessment in a clear, structured, and accessible manner for the health care team to facilitate action by the LIP using the RD’s assessments relating to the patient’s nutritional status. Tables 4, 5, and 6 provide examples of documentation that can be used to accomplish this. The RD can

only document the nutrition diagnosis; the medical diagnosis must be determined and documented by the physician. The medical diagnoses documented by physicians are the only ones that can be used by the clinical documentation specialists to assign the appropriate ICD-9 codes for determination of the CMI and the MS-DRG for reimbursement for the hospital stay. Therefore, the physician must document in his/her notes the malnutrition diagnosis, including the degree of malnutrition. Refer to Tables 4, 5, and 6 for example documentation of these malnutrition diagnoses by the RD and LIP. To most reliably have the nutritional status

**Table 4. Example Nutrition Documentation for Assessing Degree of Malnutrition**

<b>Adult Anthropometrics</b>	
Height: 6’ 1”	Weight: 72.7kg (160 lbs)
Usual body weight: 82.6kg (182lb)	Weighed last: 2 months prior to admission
IBW: 83kg (184 lb)	% IBW: 87%
% Usual Body Weight: 88%	BMI: 21.1
Pertinent Nutrition History: 22 lb weight loss since admission (13%) with poor intake	
Degree of Malnutrition: severe acute malnutrition	
Refeeding Risk: Yes	

**Table 5. Example RD Documentation for Assessing Degree of Malnutrition**

<b>ASSESSMENT: Degree of Malnutrition (choose one) mild/moderate/severe based on:</b>
<p>Mark all that apply:</p> <ul style="list-style-type: none"> <li>• Insufficient energy or protein intake</li> <li>• Poor nutritional intake over ___ period of time</li> <li>• ___% loss of usual body weight (UBW) over ___ weeks/months</li> <li>• Catabolic response to acute illness/inflammatory process</li> <li>• Increased nutrient needs due to acute illness</li> <li>• Muscle wasting, loss of subcutaneous fat</li> <li>• Bedridden/Reduced functional capacity</li> <li>• Fluid accumulation masking weight loss/nutritional edema</li> <li>• Malabsorptive process preventing enteral absorption and/or altering nutrient utilization</li> <li>• Hyperglycemia preventing utilization of nutrients</li> <li>• ETOH abuse</li> <li>• Multiple hospitalizations/procedures requiring NPO status</li> <li>• Other: _____</li> </ul>

reflected in the DRG of the hospital stay, documentation needs to be seen in the LIP’s progress note assessment and included in the discharge summary diagnoses.

Only one CC or MCC increases the relative weight, and hence, the dollar amount of total reimbursement of the assigned MS-DRG. Therefore, the diagnosis of malnutrition may not always change the actual reimbursement rate for a patient’s hospital stay. However, it is worthwhile to identify and correctly capture all possible diagnoses, including malnutrition,

using ICD-9 (soon to be ICD-10) codes to include in the MS-DRG system by the coding department. Table 7 provides examples of DRGs that are changed as a result of malnutrition documentation by the LIP with the corresponding increase in CMI and reimbursement.

Although three malnutrition diagnosis codes qualify as MCCs (kwashiorkor, nutritional marasmus, and severe protein calorie malnutrition), kwashiorkor and marasmus are *rarely* seen in adults in the United States, and as such, should *rarely* be used to document

**Table 6. Example Documentation of Malnutrition**

Nutrition Diagnosis as written by RD	Medical Diagnosis as written by LIP	Corresponding ICD-9 (ICD-10) Code	MCC/CC
Moderate protein-calorie malnutrition related to limited access to food as evidenced by BMI less than 19	Moderate malnutrition or Moderate protein-calorie malnutrition	263 (E44)	CC
Severe malnutrition related to difficulty swallowing for past 2 months as evidenced by weight loss of 14% usual body weight	Severe malnutrition	262 (E43)	MCC
Severe malnutrition related to poor absorption from short bowel syndrome as evidenced by high ostomy output and weight loss of >10% usual body weight in past 3 months	Severe malnutrition	262 (E43)	MCC

**Table 7. Example Changes in DRG When Malnutrition is Documented**

DRG (using ICD-9 codes)	Initial CMI	Estimated Revenue	New DRG w/ Malnutrition Diagnosis	New CMI	New Estimated Revenue	Increase in CMI	Additional Revenue
390 GI Obstruction without CC/MCC	0.6046	\$4,402.10	389 GI Obstruction with CC (moderate malnutrition is the CC)	0.8853	\$5,777.11	0.2807	\$1,375.01
683 Renal Failure	0.9655	\$6,227.77	684 Renal Failure w/MCC (severe malnutrition is the MCC)	1.5401	\$9,456.53	0.5746	\$3,228.76
434 Cirrhosis & Alcoholic Hepatitis without CC/MCC	0.6084	\$3,505.21	432 Cirrhosis & Alcoholic Hepatitis w/ MCC (severe malnutrition is the MCC)	1.6737	\$9,765.18	1.0653	\$6,259.97

**Note:** These estimates are used for example only, and are developed using the Payment System Fact Sheet Series published by CMS<sup>5</sup>

malnutrition. If these codes are routinely documented as part of the principal or secondary diagnoses for the patient, the hospital has a high probability of receiving an audit by the Office of the Inspector General to verify the accuracy of the code assignment. Severe protein calorie malnutrition is the only remaining malnutrition code that is considered a MCC to increase the relative weight of the assigned MS-DRG. Table 1 lists the malnutrition diagnoses that are considered CCs.

If the RD documents malnutrition in his/her assessment, but the physician does not include malnutrition as a medical diagnosis, the coding department may send a query to the physician to see if he/she agrees. Efficient communication between the RD and physician during the patient's hospitalization can alleviate the need for the coding department to send a query, saving time and healthcare resources.

## CONCLUSION

Identifying and treating malnutrition in hospitalized patients is essential to improving patient outcomes. Documentation of the malnutrition diagnosis is also important for appropriate reimbursement to hospitals for the actual work done by the health care team. Consistency of diagnosing malnutrition at each hospital can be obtained by a multidisciplinary group writing the policy for defining malnutrition based on evidence based guidelines. As the head of the healthcare team, the physician should remain actively involved in the treatment of the malnutrition, while utilizing the care and expertise provided by registered dietitians. ■

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