Malnutrition Diagnosis

A. Responsible team member

- Dietitian or qualified Care Team member

B. Definition

The identification of and labeling of a patient's malnutrition problem that requires independent treatment that may be secondary to the patient's index hospital admission[1]

C. Data sources/tools

1. Results from the most recently completed nutrition assessment[1]
2. SNOMED, ICD-9, and ICD-10 codes recommended for use in diagnosing patients as malnourished or at risk for malnutrition (refer to Table 5: Sample Diagnosis Codes and Code Descriptors to Document a Malnutrition-related Diagnosis in the EHR on subsequent page for code descriptors)

D. Data to collect and record

1. There are three distinct components that should be included in determining and recording information in the medical record regarding a malnutrition diagnostic statement[1]:
   a) Description of alterations in a patient's status
   b) Malnutrition signs and symptoms
   c) Malnutrition etiology
2. The patient's diagnosis code should also be captured in the medical record and the "problem list" for the facility to ensure the diagnosis is fully documented

E. Malnutrition Diagnosis Steps

- Record diagnosis in the medical record and the "problem list"
- Establish possible causes from the nutrition assessment and other patient data
- Consider conditions unique to the patient that may impact malnutrition status and diagnosis
- Communicate the diagnosis to the attending physician
- Communicate the diagnosis to the patient and family caregiver
- Address patient and family caregiver immediate questions

F. Decision points for continuation of care

1. Continuation of malnutrition care should only proceed if the provider identifies a malnutrition-related diagnosis[1] and if is in alignment with patient/family wishes, particularly for end-of-life care

Best Practices

1. The diagnosis should be made by a dietitian or clinician on the Care Team with the appropriate qualifications (this 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[1]
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. Recommend hospitals grant dietitians ordering privileges to facilitate efficient and timely diagnosis, pending accordance with state law. (Note: This may require a physician co-sign.)
6. If the Dietitian making the diagnosis does not have order-writing privileges, dietitian must communicate the diagnosis with the attending physician and agree on a treatment plan processes are housed

Providers should select appropriate diagnosis codes to document a malnutrition-related diagnosis in patients' medical records or in the EHR. Table 5 provides a list of codes providers can use to indicate a patient's malnutrition status. However, this is not an exhaustive list and users should verify most recent diagnosis codes from available sources.

Table 5: Sample Diagnosis Codes and Code Descriptors to Document a Malnutrition-related Diagnosis in the EHR

SNOMEDCT

238107002	Deficiency of macronutrients (disorder)
272588001	Malnutrition (calorie)
190602008	Moderate protein-calorie malnutrition (weight for age 60-74% of standard)
190603003	Mild protein-calorie malnutrition (weight for age 75-89% of standard)
360549009	Severe protein-calorie malnutrition (Gomez: less than 60% of standard weight)
190605005	Mild protein energy malnutrition (disorder)
190606006	Moderate protein energy malnutrition
65404009	Undernutrition - Malnutrition
70241007	Nutritional Deficiency - Malnutrition
238107002	Deficiency of macronutrients (disorder)
665128014	Malnutrition (calorie) (disorder)
407752010	Malnutrition (Calorie)
2920802017	Malnutrition, calorie

LOINC

54816-4	Protein or calorie malnutrition or at risk for malnutrition in last 7 days
75305-3	Nutrition status

ICD-9

260	Kwashiorkor
261	Nutritional marasmus
262	**Other severe protein-calorie malnutrition**
263	Malnutrition of moderate degree
263.8	**Other protein-calorie malnutrition**
263.9	**Unspecified protein-calorie malnutrition**
799.4	Cachexia

ICD-10

E40	Kwashiorkor
E41	Nutritional marasmus
E42	Marasmic kwashiorkor
E43	**Unspecified severe protein-calorie malnutrition**
E44.0	**Moderate protein-calorie malnutrition**
E44.1	Mild protein-calorie malnutrition
E46	**Unspecified protein-calorie malnutrition**
E64	Sequelae of protein-calorie malnutrition

Note: **Bolded codes** are those most commonly used to indicate a patient's malnutrition status as they specify severity of illness. However, the selection of diagnosis codes is based on a dietitian or physician assessment of individual patients.

SAMPLE PDSA Cycle: Malnutrition Diagnosis

Project: Malnutrition Quality Improvement Initiative
Objective of this PDSA cycle: Test completion of documentation of patient diagnosis in the medical record for all patients age 65+ years identified as malnourished.

PLAN:

Questions: Will all patients age 65+ years identified as malnourished via a malnutrition assessment receive a malnutrition diagnosis?
Predictions: All patients age 65+ years identified as malnourished will receive a malnutrition diagnosis
Plan for change: Who, what, when, where
Record a diagnosis in the patient medical record and the "problem list" as soon as possible (within 24 hours) following a malnutrition assessment where the patient is identified as malnourished.

- Following the malnutrition assessment, the dietitian or qualified member of the Care Team should enter a medical diagnosis corresponding to the findings of the malnutrition assessment

Plan for data collection: Who, what, when, where

- Dietitian or other qualified member of the Care Team should document the malnutrition diagnostic statement in the patient's treatment record, this statement should include:
- Description of alternations in a patient's status
    - Malnutrition signs and symptoms
    - Malnutrition etiology
    - In addition to the diagnostic statement, the dietitian or other qualified member of the Care Team also documents the associated malnutrition diagnosis code(s)
- Dietitian or other qualified member of the Care Team documents any issues associated with establishing a diagnosis and documenting it in the medical record
- If EHR does not already provide a list of available diagnostic codes for easy selection by Care Team member, this may be something to request assistance with from an Informatics Representative to program in the EHR

DO:

Carry out the change: Collect data and begin analysis

- Implement change of process including training, policy, incentives, and technology adjustments.
- Enter the malnutrition diagnosis in patients found to be malnourished immediately following a malnutrition assessment
- Review EHR records for 15 eligible patients identified as malnourished
- Record results of data collected (e.g., a complete diagnosis was not entered for 5 out of 15 patients because providers were unaware of information)

STUDY:

Complete analysis of data

- **Debrief:** Discuss how to modify diagnosis entry processes to support the capture of complete diagnostic information. For example, could EHR templates be modified to include more diagnosis codes or more clearly indicate information necessary to capture?

Verify predictions

- How closely did the results of this cycle match the prediction that was made earlier?
- Summarize any new knowledge gained by completing this cycle. For example, diagnosis documentation is typically completed by a dietitian at the end of the work day when they complete administrative duties. However, an informal diagnosis is often listed in patient notes to support formal documentation.

ACT:

Identify actions

- List actions to take as a result of this cycle
- Repeat this test for another 48 hours after providing clearer instructions to the Care Team regarding diagnosis details to be captured or after appropriate modifications have been made in the data collection processes in the EHR. Plan for the next cycle (adapt change, another test, implementation cycle): Run a second PDSA cycle for another 48 hour period.