

Malnutrition Screening

A. Responsible team member

- Nurse or qualified Care Team^{vi} member

B. Definition^{vii}

The systematic process of identifying an individual who is malnourished or who is at risk for malnutrition to establish whether the patient is in need of a nutrition assessment⁽²⁰⁾

C. Data sources/tools

1. Validated screening tools such as the Malnutrition Screening Tool (see [Table 3: List of Validated Malnutrition Screening Tools](#))⁽²¹⁾, or some other valid and reliable screening tool
2. Medical or health records
3. Patient/family interviews to obtain additional history
4. Attending physician referral form

D. Data to collect and record

1. Assessment of recent weight loss⁽²¹⁾
2. Assessment of decreased appetite⁽²²⁾
3. Height
4. Weight

F. Malnutrition screening and follow-up steps

- Screen patient with screening tool⁽²²⁾
- Score patient to determine risk⁽²²⁾
- Document results of patient screening in the EHR
- For patients determined to be at risk for malnutrition refer immediately (within 24 hours) for nutrition consult and assessment⁽²²⁾
- For patients determined to be at risk for malnutrition during screening, expedite nutrition intervention within 24 hours with food and/or oral nutrition supplement per malnutrition-risk protocol to accelerate treatment, unless contraindicated
- Consult patient and/or family caregiver, or refer to information in the patient's medical record, regarding diet restrictions, difficulties swallowing, and preferences when issuing the malnutrition-risk diet order

G. Decision points for continuation of care

1. If the patient is determined to be at risk for malnutrition from either the initial or a secondary screening test during hospital stay, a nutrition assessment is needed⁽²¹⁾

Best Practices

1. Screening is recommended to be conducted by a qualified nurse but can be conducted by any qualified member of the Care Team^{vii}
2. Use a validated tool in the screening for malnutrition in a standardized way consistent with the recommendations from tool developers⁽²³⁾ (See [Table 3](#))
3. Establish a policy to order a nutrition consult and assessment for all patients at nutritional risk
4. Establish policy and protocol to feed patients within 24 hours of malnutrition screen where patient is determined to be “at risk”
5. Screen surgical patients upon admission for malnutrition who have not received a malnutrition screening (as evidenced by the medical record) within 7 days prior to admission
6. Complete malnutrition screening 24 hours prior to surgery for patients who are NPO and screen again within 24 hours following surgery
7. Rescreening patients
 - Within 72 hours, rescreen patients age 65+ years who are at high-risk for malnutrition due to chronic conditions including stroke, COPD, diabetes, and certain cancers
 - Rescreen every seven days if the overall length of stay allows for it⁽²²⁾
8. Leverage EHR to standardize malnutrition documentation, facilitate clinical flow, and build in advisory or reminders
 - Install a validated malnutrition screening tool into the nurses' workflow and where other admission processes are housed

^{vi} Qualified Care Team members are those who have undergone appropriate training or certification.

^{vii} Initial patient screening should occur within 24 hours of hospital admission.

Table 3: List of Validated Malnutrition Screening Tools

Birmingham Nutrition Risk (BNR)

[Malnutrition Screening Tool \(MST\)](#)^[21]

[Malnutrition Universal Screening Tool \(MUST\)](#)

[Mini Nutrition Assessment \(MNA\)](#)

Nutrition Risk Classification (NRC)

Nutritional Risk Index (NRI)

[Nutritional Risk Screening \(NRS\) 2002](#)

[Short Nutrition Assessment Questionnaire \(SNAQ\)](#)

SAMPLE PDSA Cycle: Malnutrition Screening

Project: Malnutrition Quality Improvement Initiative

Objective of this PDSA cycle: Test completion of malnutrition screening using a validated tool for all admitted patients age 65+ years

PLAN:

Questions: Will all newly admitted patients age 65+ years receive malnutrition screening?

Predictions: All patients age 65+ years will receive malnutrition screening

Plan for change: Who, what, when, where

Complete malnutrition screening using a validated tool for all newly admitted patients who are age 65+ years during a 24 hour period

- During the intake process, nurse will screen all eligible patients using a validated screening tool

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

- Nurse documents the results of the screening (i.e., “at risk” or “not at risk” for malnutrition) in the patient’s medical record or electronic health record (EHR)
- Nurse documents any issues that arise with the screening process and reasons for inability to complete the screening for any patients
- If EHR does not already generate automatic dietitian requests or reminders for malnutrition-risk diet orders based on screenings that have identified patients “at risk” for malnutrition, 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

- Conduct the malnutrition screening test during a 24 hour period
 - For patients found to be at risk for malnutrition, attempt to have the EHR generate an automatic request to the dietitian to complete an assessment
 - For patients found to be at risk for malnutrition, attempt to have the EHR generate an automatic reminder to place a malnutrition-risk diet order
- Review medical records for 15 eligible patients admitted during the 24 hour period
- Record results of data collected (e.g., the nurse could not complete the screening for 5 out of 15 patients because screening slowed the intake process and there was a backlog of patients)

STUDY:

Complete analysis of data

- **Debrief:** Discuss whether patients could be stratified to support the screening of patients during the intake process. For example, could a screening be completed for planned admissions in the outpatient setting and prior to admission?

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, malnutrition screening for planned cases can be completed during the preadmission phase so that nurses will focus on emergent cases at admission. Nurse will still screen all planned cases who were not screened prior to admission.

ACT:

Identify actions

- List actions to take as a result of this cycle
- Repeat this test for another 24 hours after initiating preadmission malnutrition screening in the outpatient clinic. Plan for the next cycle (adapt change, another test, implementation cycle): Run a second PDSA cycle for another 24 hour period.