

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.

SAMPLE PDSA Cycle: Nutrition Assessment

Project: Malnutrition Quality Improvement Initiative

Objective of this PDSA cycle: Test completion of nutrition assessment using a standardized tool for all admitted patients age 65+ years

PLAN:

Questions: 1. Will all patients age 65+ years identified as “at risk” for malnutrition following a malnutrition screening receive a nutrition assessment? 2. Will the diagnosis of malnutrition be properly documented in the electronic health record using structured data?

Predictions: All patients age 65+ years identified as “at risk” for malnutrition will receive a nutrition assessment and a diagnosis will be correctly documented using structured data

Plan for change: Who, what, when, where

Complete nutrition assessment using a standardized tool within a 24 to 48 hour period for all patients age 65+ years who are identified as “at risk” for malnutrition following a malnutrition screening

- Following malnutrition screening, dietitian or qualified clinician will assess all eligible patients for malnutrition using a validated nutrition assessment tool
- Plan for data collection: Who, what, when, where
- Dietitian or qualified clinician documents the results of the assessment (e.g. cause of malnutrition diagnosis) in the EHR
- Dietitian or qualified clinician documents any issues that arise with the assessment process and reasons for inability to complete the assessment for any patients

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

- Part of the EHR documentation process includes a required field to document a diagnosis using structured data
- 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 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 assessment within a 24 to 48 hour period following the malnutrition screening through which patients identified as “at risk”
- Review EHR records for 5 eligible patients identified as “at risk” for malnutrition
- Record results of data collection (e.g., the dietitian or qualified clinician was able to complete assessment during a 24 to 48 hour period for all eligible patients but was unable to document specific elements of the assessment results in structured data fields)

STUDY:

Complete analysis of data

- **Debrief:** Discuss whether there are modifications the hospital can make to the EHR to support the documentation of the results of nutrition assessment. For example, could the EHR template be modified to include the most frequently used data fields needed to document assessment results. Additionally, consider whether all dietitians or clinicians have received appropriate training on the documentation of results.
- 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, limitations in the EHR documentation template during nutrition assessment may prevent the documentation of screening results in a timely manner.

ACT:

Identify actions

- List actions to take as a result of this cycle
- Repeat this test for another 72 hours after providing modifications to the EHR template. Plan for the next cycle (adapt change, another test, implementation cycle): Run a second PDSA cycle for another 72 hour period.

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.

SAMPLE PDSA Cycle: Malnutrition Care Plan Development and Implementation

Project: Malnutrition Quality Improvement Initiative

Objective of this PDSA cycle: Test the documentation and implementation of a malnutrition care plan for all patients age 65+ years diagnosed as malnourished

PLAN:

Questions: Will all patients age 65+ years with a malnutrition diagnosis have record in the EHR of a developed and implemented malnutrition care plan?

Predictions: All patients age 65+ years with a malnutrition diagnosis will have documentation in the EHR of a developed and implemented malnutrition care plan

Plan for change: Who, what, when, where

Enter in the EHR a malnutrition care plan and documentation that it has been initiated within 24 hours of documentation of malnutrition diagnosis for all eligible patients age 65+ years

- Following diagnosis, dietitian or qualified clinician will enter a malnutrition care plan for all eligible patients with a malnutrition diagnosis, including identification of the interdisciplinary Care Team. The role of the patient should also be clearly defined.
- Following documentation of the malnutrition care plan, members of the interdisciplinary Care Team will begin implementing it within 24 hours

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

- Dietitian or qualified clinician documents the malnutrition care plan (i.e. treatment goals, prescribed treatment/ intervention) in the EHR
- Care Team members responsible for components of the malnutrition care plan document completion or stage of execution of various components in the EHR

DO:

Carry out the change: Collect data and begin analysis

- Conduct the assessment during a 24 hour period following the documentation of a diagnosis in the EHR
- Review EHR records for 15 eligible patients identified as malnourished
- Record results of data collected (e.g., components of the malnutrition care plan were not implemented for 3 out of 15 patients because Care Team roles were not clearly delineated)

STUDY:

Complete analysis of data

- Debrief: Discuss how to facilitate greater Care Team coordination and communication to ensure all elements of the malnutrition care plan are implemented. For example, could a member of the Care Team be designated to ensure that the roles and responsibilities of implementing the malnutrition care plan are communicated to all members?

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, documentation of the malnutrition care plan and Care Team roles and responsibilities in the EHR is not sufficient to ensure effective team coordination
- 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.

ACT:

Identify actions

- List actions to take as a result of this cycle
- Repeat this test for another 96 hours after designating a Care Team member responsible for team communication. Plan for the next cycle (adapt change, another test, implementation cycle): Run a second PDSA cycle for another 96-hour period.

SAMPLE PDSA Cycle: Discharge Planning

Project: Malnutrition Quality Improvement Initiative

Objective of this PDSA cycle: Test the inclusion of malnutrition related components in the discharge planning for all patients age 65+ years diagnosed as malnourished

PLAN:

Questions: Will all patients age 65+ years with a malnutrition diagnosis have malnutrition related recommendations and orders included in their discharge plan?

Predictions: All patients age 65+ years with a malnutrition diagnosis will have malnutrition components included in their discharge plan

Plan for change: Who, what, when, where

Include malnutrition-specific discharge materials tailored to the individual patient in the patient's overall discharge materials for all eligible patients age 65+ years with a malnutrition diagnosis

- 24 hours prior to discharge, all members of the Care Team will provide input on the malnutrition components that should be included in the patient's discharge plan for all eligible patients with a malnutrition diagnosis, including care transition documents for the provider in the post-discharge setting

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

- All members of the interdisciplinary Care Team are eligible to provide documentation in the discharge template of malnutrition components (i.e. education materials) that should be included in the discharge plan SAMPLE PDSA Cycle: Discharge Planning

DO:

Carry out the change: Collect data and begin analysis

- Conduct the assessment during a 24 hour period prior to the discharge of patients with a malnutrition diagnosis
- Review EHR records for 10 eligible patients identified as malnourished
- Record results of data collected (e.g., malnutrition discharge planning materials were not provided for 2 out of 10 patients because there is no reminder system in place to alert the Care Team to the need to provide these materials)

STUDY:

Complete analysis of data

- Debrief: Discuss what kinds of reminder systems could be employed to help ensure the Care Team provides malnutrition discharge materials for eligible patients. For example, could a reminder system be incorporated into the EHR system to alert providers 24 hours prior to discharge that malnutrition discharge materials should be prepared?

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, the lack of a designated reminder system to alert the Care Team 24 hours before patient discharge that malnutrition discharge planning materials should be prepared and provided decreases the likelihood that these components will be included in the discharge materials

ACT:

Identify actions

- List actions to take as a result of this cycle
- Repeat this test for another 24 hours after providing modifications to the EHR system. Plan for the next cycle (adapt change, another test, implementation cycle): Run a second PDSA cycle for another 24 hour period