Consistency of Malnutrition Diagnoses among Registered Dietitian Nutritionists and Physician or Physician Extenders in the Clinical Inpatient Setting

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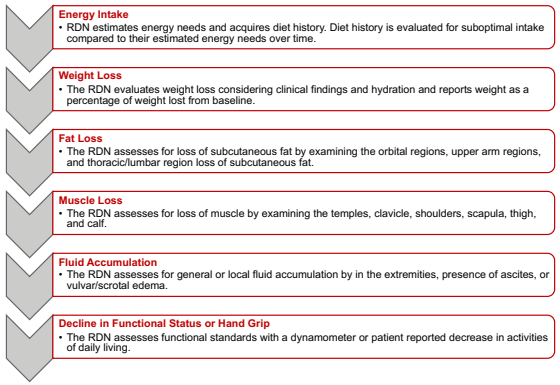
ABSTRACT

Background: Historically, diagnosis of malnutrition lacked specific and evidenced-based criteria, resulting in inconsistent approaches and missed diagnoses. In 2012, the American Society for Parenteral and Enteral Nutrition and Academy of Nutrition and Dietetics published evidence-based guidelines for assessing and diagnosing malnutrition. The Nutrition Services team at The Ohio State University Wexner Medical Center (OSUWMC) adopted these guidelines in 2016. The Registered Dietitian Nutritionist (RDN) is responsible for assessing and diagnosing malnutrition; however, a physician or physician extender (P/PE) must include malnutrition in the patient's diagnoses in order to bill for malnutrition related treatment.
Objective: Determine the rate at which malnutrition is diagnosed by the P/PE following RDN diagnosis.
Methods: A retrospective chart review was used to identify patients diagnosed with malnutrition by an RDN. The review included all patients admitted to four units representing general medicine patients across OSUWMC between May-July 2019. Malnutrition diagnoses by RDNs and P/PEs were recorded and analyzed.
Results: Of those diagnosed with malnutrition by an RDN (n=205), 74.1%(n=152) were diagnosed by a P/PE. Among PCPs %(n) that diagnosed malnutrition were APRN-CNPs 23.0(35), DOs 15.1(23), MBBSs 4.6(7), MDs 55.3(84), and PA-Cs 2.0(3).
Conclusions: Though malnutrition diagnoses by a P/PE occurred frequently, the rate of diagnoses by a P/PE can still improve. Accurate diagnoses by a P/PE may result in recovered reimbursement related to missed P/PE malnutrition diagnoses. The results of this study may be used to create an EMR system notification that alerts P/PEs of an RDN's malnutrition diagnosis.

BACKGROUND

- Malnutrition affects up to 50% of hospitalized patients, though only a small percentage of these hospital stays are coded for malnutrition due to missed diagnoses.[1]
- Malnutrition increases direct and indirect healthcare costs. Sources estimate total US healthcare costs related to disease-related malnutrition to be between $147 and $157.7 billion annually.[1]

Figure 1. ASPEN/AND Criteria for RDN Malnutrition Diagnoses[2]



Note: Providers assess the above six characteristics in the context of an acute illness or injury, a chronic illness, or social/environmental influences. Together, the criteria and matching etiology aid providers in determining if malnutrition is present and whether it is severe or non-severe according to ASPEN/AND guidelines.

INTRODUCTION

- The RDN plays a crucial role in identifying and treating patients at risk for malnutrition.
- At OSUWMC, the RDN assesses patients utilizing the ASPEN/AND criteria for malnutrition.[2]
- These criteria state that at least two of the six criteria (Figure 1) must be met to identify and diagnose severe or non-severe malnutrition.
- RDN diagnoses of malnutrition are not adequate to apply code for billing after discharge. Only P/PE medical diagnoses can be used to bill for malnutrition.[1]
- If a P/PE diagnoses malnutrition, the coding department can accurately assign ICD-10 codes associated with malnutrition to ensure proper reimbursement.[1]

OBJECTIVE

- Determine the rate at which malnutrition is diagnosed by the P/PE following RDN diagnosis.

METHODS

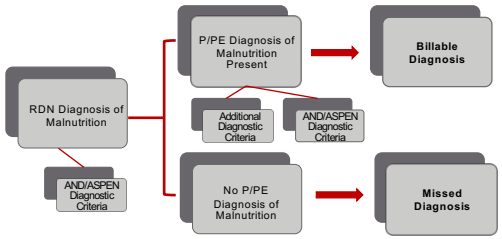
Study Overview

- A retrospective chart review was used to identify patients diagnosed with malnutrition by an RDN.
- Inclusion criteria:
  - All patients admitted to four units representing general medicine patients across OSUWMC:
    - C17 James Cancer Hospital
    - H2 Ross Heart Hospital
    - 11R University Hospital
    - BSH 10 Brain and Spine Hospital
  - Admission between May and July 2019.
- Malnutrition diagnoses by RDNs and P/PEs were recorded and analyzed.

Data Collection

- De-identifiable data collected and documented via Microsoft Excel (Figure 2).
- Other collected information:
  - P/PE Discipline
    - APRN-CNP
    - DO
    - MBBS
    - MD
    - PA-C
  - Physician Type
    - Attending Physician
    - Resident Physician

Figure 2. Data Collection Process



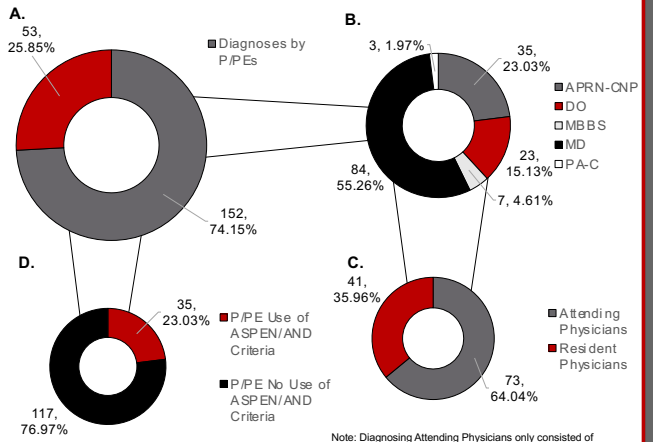
Data Analysis

- All data were analyzed using Microsoft Excel to determine frequency.

RESULTS

- 74.15% of RDN malnutrition diagnoses (N=205) were diagnosed with malnutrition by P/PEs (Figure 3A).
  - Among P/PEs who diagnosed malnutrition, 55.26% were MDs, 23.03% were APRN-CNPs,15.13% were DOs, 4.61% were MBBSs, and 1.97% were PA-Cs (Figure 3B).
    - Among Physicians (MD, DO, MBBS), 64.04% were Attending Physicians who were either Medical Oncologists or Hospitalists (Figure 3C).
  - 23.03% of P/PEs utilized ASPEN/AND Criteria (Figure 3D).

Figure 3. Physician/Physician Extender (P/PE) Malnutrition Diagnoses; n, %



Note: Diagnosing Attending Physicians only consisted of Medical Oncologists and Hospitalists

CONCLUSIONS

- Though malnutrition diagnoses by a P/PE occurred frequently, the rate of diagnoses by a P/PE can still improve.
- Malnutrition results in increased direct/indirect costs including greater staff labor, greater length of stay, and increased readmissions/complication rates.[1]
- Proper diagnoses and coding of malnutrition by P/PE may result in increased hospital reimbursement. This requires improvements in the identification and coding of malnutrition as well as improved communication between the RDN and P/PE.[1]
- The results of this study may be used to create an EMR system notification that alerts P/PEs of an RDN's malnutrition diagnosis leading to more timely and accurate diagnoses.

REFERENCES

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