Bridging the Gap from Hospital to Home: Implementation of a Malnutrition Transitions of Care Program

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Purpose: A current state analysis of inpatient workflow identified an existing gap in the post-discharge nutrition care of malnourished patients. Excellent nutrition care is provided while patients are hospitalized, however it is uncertain if patients have the ability, access, and tools to follow through with their nutrition care plan, established by the inpatient registered dietitian nutritionist (RDN), once they return home. Therefore, a malnutrition transitions of care program was developed, with an RDN performing in-home visits with patients identified as malnourished during their hospital admission. Patients also identified as Food Insecure are given a box of food upon discharge in addition to the RDN in-home visit.

Relevance: At NHRMC, 30-day readmission rates are nearly twice as high for malnourished patients compared to all-cause readmission rates; 22.97% vs 11.46% respectively. During a 10-day pilot, 260 patients were screened for food insecurity using the Hunger Vital Signs. 20% were identified as food insecure, while 1.5% were both food insecure and malnourished. The minimal overlap between the two suggests that there are varying clinical and social needs for these patients.

Background: Using the electronic medical record, a clear discharge nutrition plan was established, as well as a mechanism to refer patients to the clinical outreach RDN and order the discharge food box for food insecure patients. The clinical outreach RDN contacts the patients to schedule a visit in their home. During the visit, the RDN ensures that the nutritional plan of care is understood, identifies other nutrition-related issues, and connects patients with community resources as needed for continued optimization of the patients’ nutritional status.

Methods: Readmission data is obtained using a web-based business intelligence tool. Improvements in the patients’ nutritional status will be evaluated by comparing the patients’ nutritional status at the time of the RDN home visit to what was recorded by the RDN during hospitalization. This included Nutrition Focused Physical Exam results as well as changes in weight and PO intake. An enterprise analytics report measures utilization and associated cost with emergency department (ED) visits and inpatient admissions before and after the in-home nutrition intervention.

Results / Outcomes: 30-day malnutrition readmission rates for February 2019 are down 24% from February 2018. 30-day malnutrition readmission rates are down 17.5% from January 2019 (pre-intervention) to February 2019 (post-intervention) and have decreased another 12.8% in March 2019. Utilization rates have declined across all categories when comparing patients pre and post-intervention. Data shows the intervention group with 11.4% less ED visits, 9% lower ED associated charges, 12% less inpatient admissions, 3% lower inpatient associated charges, and 8% lower average total length of stay, when compared to a control group of patients with a diagnosis of malnutrition that did not receive the clinical outreach RDN home visit.

Conclusions: An RDN in a transitions of care role, providing in-home post-acute care to malnourished and sometimes food insecure patients, is a unique opportunity for RDNs to make profound impacts within organizations and communities. The belief is that initial goals will be met as well as other unintended outcomes will be seen, such as improved patient satisfaction and RDN engagement.

Implications for Policy or Practice: This is an exciting and dynamic role in the dietetics profession. RDNs must embrace this space and begin bridging the gap in knowledge, access and our patients’ ability to care for themselves post-discharge.

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Scoring Using the Malnutrition Screening Tool: Dietetic Intern and Registered Nurse

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Purpose: To assess the number of patients that receive malnutrition screening and the accuracy of said screening on patients admitted to a large research-based teaching hospital.

Relevance: At the University of Virginia Health System (UVAHS), the Malnutrition Screening Tool (MST) is intended to be completed by registered nurses (RNs) within 24 hours of adult inpatient admission. The recent small, random audits at UVAHS have shown that 75% of patients are screened for malnutrition. More robust data are needed to better quantify the percentage of patients that receive an MST by nursing. Additionally, accuracy of the MST by nursing will be useful in determining whether education and/or systems changes are needed to improve screening processes.

Background: Malnutrition screening is an important first step in identifying hospitalized inpatients at risk for increased lengths of stay, mortality, and morbidity.

Methods: The dietetic intern completed the MST using a paper form one day per week for 7 weeks. A list of newly admitted adult patients was gathered from the electronic medical report inpatient length of stay at UVAHS within 1 hour of the dietetic intern conducting MST screenings. A total of 85 patients were screened by the dietetic intern. After the MST was conducted, information was gathered from patients medical records: age, sex, admission date and time, unit, primary diagnosis, nursing completion of the MST, and nursing MST score (if applicable). A Weighted Cohens Kappa test was used to assess interrater reliability between the dietetic intern and nursing, including the probability that the scores were the same by chance.

Results / Outcomes: Nursing screened 67 out of the 85 patients (78.8%) seen by the dietetic intern. The Weighted Cohens Kappa test showed moderate interrater reliability between dietetic intern and nursing scores (Kappa score = 0.498). Out of a total of 85 patients screened for malnutrition by the dietetic intern, 20 out of the 85 (24%) were not triggered to see a registered dietitian nutritionist (RDN) due to nursing either not filling out the MST or filling it out incorrectly. Twelve out of the 67 (18%) patients screened by RNs as not being at risk were at risk for malnutrition based on dietetic intern screening. Eight out of 18 (44%) patients that nursing did not screen were at risk for malnutrition based on dietetic intern screening.

Conclusions: Nursing screened 78.8% of patients for malnutrition using the MST. This is slightly higher than 75% that was seen in recent small random audits completed at UVAHS. Twenty out of 85 (24%) patients were missed due to nursing either not filling out the MST or filling it out incorrectly. Results indicate a potential knowledge deficit amongst nursing regarding how to conduct malnutrition screening. Results also indicate a need for improved compliance with use of the MST to ensure at-risk patients are referred to RDNs.

Implications for Policy or Practice: Next steps: RDNs will collaborate with nursing to identify barriers to nurses completing the MST and doing so correctly. Then, action plans to address these results will be devised.

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