Prioritizing Malnutrition Care Through Discrete eCQM Data Tracking in the Electronic Health Record for an Academic Medical Center

Author: J. Wills; UNC Medical Center

Purpose: The purpose was to identify and prioritize hospitalized patients requiring medical nutrition therapy using real-time data in the electronic health record (EHR) to inform the level of care by the registered dietitian nutritionist (RDN).

Relevance: Mitigating the mortality associated with malnutrition and the risks of 30 day readmissions with staffing resource constraints in a challenging healthcare setting requires efficiencies, improved response time to intervention and prioritization of care for patients with malnutrition or those vulnerable to the prevalence of malnutrition.

Background: In 2016, the systematic review from the Academy of Nutrition and Dietetics, Evidence Analysis Library in Nutrition Screening for the EHR. After implementation, nutrition screening consult completion rate was <80% due to staffing limitations. Literature states 20% to 50% of hospitalized patients are at risk or are malnourished upon hospital admission. Therefore, it was important to prioritize patients using data informed decision making. With the Malnutrition Quality Improvement Initiative (MQii) Learning Collaborative as support, an effort was made to move the electronic Clinical Quality Measures (eCQMs) screening, assessment, care plan and documentation into a discrete data format within the EHR to better inform clinical practice in prioritization of care.

Methods: In 2017, the lead technology RDN in collaboration with the Information Services Department (ISD) implemented the 2012 Academy of Nutrition and Dietetics/American Society for Parenteral and Enteral Nutrition malnutrition clinical characteristics criteria and the MST into discrete fields of an existing EHR. This allowed collected aggregated data to inform screening, assessment and documentation of outcomes around the malnutrition eCQMs. Data of patient demographics, nutrition screening, assessment and malnutrition diagnosis were extracted from a database repository in June and November 2017. Outcomes measured were rates of screening consultations completed by RDNs, prevalence of malnutrition in patients identified as high risk for future admission, mortality index and prevalence of moderate and severe malnutrition for all patients 65+ years of age and prevalence of moderate and severe malnutrition for all patients 65+ years of age who screened positive according to the MST.

Results / Outcomes: The completion of a malnutrition assessment increased from 79% to 95%. 26% of patients with a future admission risk and a higher mortality index screened positive for malnutrition and 19% met clinical characteristics for moderate or severe malnutrition. 74% of patients 18+ years who screened positive for malnutrition were found to have moderate or severe malnutrition and 75% of 65+ years who screened positive for malnutrition met the characteristics for moderate or severe malnutrition.

Conclusions: An older hospitalized population has a higher prevalence for malnutrition as indicated in the literature and in practice. Patients with a high mortality index and risk readmission are also vulnerable populations. Data informed decisions can identify and inform staff to prioritize those with malnutrition risk for early nutrition intervention.

Implications for Policy or Practice: Discrete, aggregated data in the EHR can inform clinical practice for prioritization of malnutrition intervention in a hospital setting.

Funding Source: None