Improving inpatient assessment of nutritional status using the Malnutrition Universal Screening Tool (MUST)

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Up to a third of patients admitted to hospital are at risk of malnutrition, leading to longer inpatient stays and increased risk of complications and readmission[1]. Early assessment of nutritional status is therefore crucial to minimise morbidity and mortality. The most commonly used validated screening tool in the UK is the Malnutrition Universal Screening Tool (MUST). The MUST is designed to assess nutritional risk and, if detected, triggers further action such as referral to a dietician. Oxford University Hospitals NHS Foundation Trust guidelines state that a MUST should be completed within 6 hours of admission and should be repeated weekly in prolonged admissions.

Aims:

1. Assess the accuracy, timing and frequency of MUST recorded for patients admitted to 4 long-stay medical wards
2. Assess and improve staff awareness of the MUST to improve recognition of patients at risk of malnutrition.

A spot audit of MUST assessments of all inpatients on 4 long-stay medical wards on a single day in October 2020 was undertaken. Following this, a pre-intervention staff questionnaire was carried out across the same wards to assess understanding and awareness of the MUST. Subsequently, an educational poster on the MUST was produced, and a brief face-to-face small group educational session was performed with staff on one of the 4 wards. A post-intervention staff questionnaire was undertaken to re-assess understanding, and a re-audit of MUST screening of patients on the same ward was carried out the following month.

79 inpatients from 4 long-stay medical wards were included in the initial audit. Only 3% (2/79) of MUST screening was completed within 6 hours and 81% (64/79) completed at all during admission, with 50% (24/48) of patients with an admission >7 days receiving weekly MUST screening. 17 staff of various roles across all 4 wards completed the pre-intervention questionnaire, of which 71% (12/17) were able to identify all 3 components of the MUST. Following the educational intervention on one ward, this improved to 91% (10/11; p = 0.35). A re-audit on the same ward demonstrated 5% (1/20) of patients met the 6-hour MUST target (p = 0.50), but overall improved completion of MUST for 95% (19/20) of inpatients during their admission (p = 0.18). A statistically significant improvement was demonstrated with repeat MUST screening, with 100% (10/10) of patients with an admission >7 days having weekly screening (p = 0.0034).

We have demonstrated that a brief face-to-face educational intervention can have a positive impact on improving staff understanding of the MUST and its usage in keeping with local guidelines. We plan to carry out the intervention across the remaining long-stay medical wards, and to consider involving the short-stay medical wards. In addition, electronic reminders and/or repeat educational sessions would be beneficial to improve long term impact, considering staff turnover on the wards.

Reference

1. BAPEN. Introduction to Malnutrition: Who is at risk of malnutrition? [Available at: https://www.bapen.org.uk/malnutrition-undernutrition/introduction-to-malnutrition?start=1]