

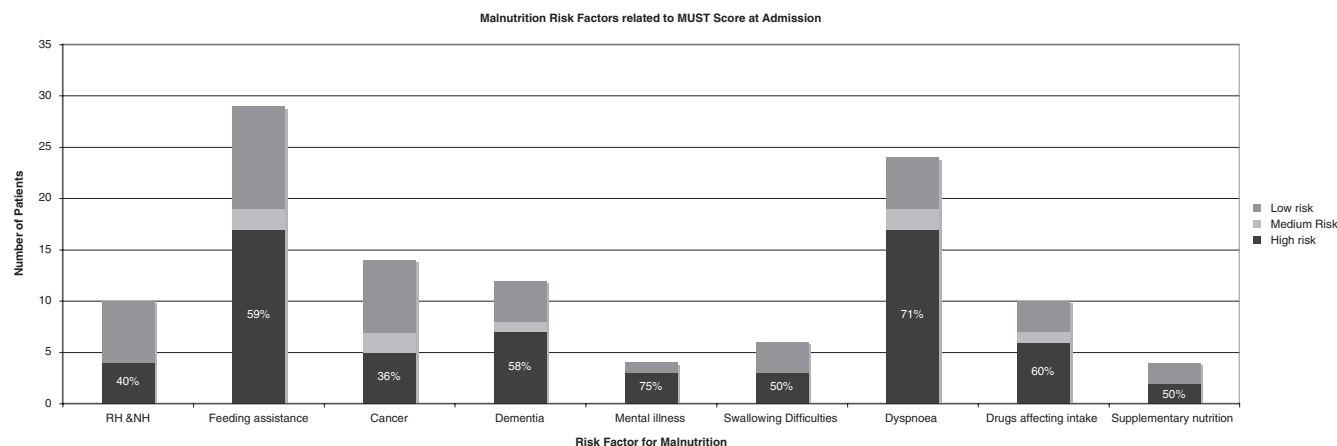
Assessment of nutrition status and screening in elderly admissions to a District General Hospital

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Malnutrition remains under-recognised and under-treated, particularly amongst the elderly population.⁽¹⁾ This population is growing and represents a disproportionately larger number of hospital admissions. In comparison to the general population, the elderly are both more vulnerable to and have a greater prevalence of malnutrition⁽²⁾ and also suffer greater morbidity and mortality when malnourished.⁽³⁾

There is relatively little quantitative data about the risk profile and quality of nutritional assessment amongst elderly hospital admissions. This study aims to assess patients aged 78 and above at admission to hospital to provide a more detailed profile of prevalence of malnutrition risk factors and correlation of these with the presence of malnutrition. In addition it assesses the quality of nutrition status screening.

Work was conducted at a district general hospital over a five-day period (23–27 May 2011) where 79 out of 102 elderly acute and elective admissions were retrospectively reviewed. Each case was evaluated for the presence of malnutrition risk factors, such as admission from care homes, necessity for assistance with feeding, presence of cancer, dementia, mental illness, swallowing difficulty, dyspnoea, medications causing reduced oral intake and use of nutritional supplements at admission. An informed MUST score to screen nutritional status was calculated independently for each patient and compared against those recorded by ward staff.



The study population included 40 females and 39 males ranging in age from 78 to 98 years. We were able to calculate MUST scores for 74 patients of which 30% were classified high risk and 6% classified medium risk, compared to 21% and 14% respectively for the general population.⁽¹⁾ The number of patients admitted with various malnutrition risk factors is illustrated in the graph above where the percentage of those who are high risk within that group is annotated. Medium to high risk MUST scores were attributed to low BMI (below 20 kg/m²) in 38%, weight loss in 17% and lack of nutritional intake in 58%.

60 patients had been screened using MUST by ward staff. For those admitted for more than 12 hours, the ward screening rate was 88%, but only 79% for the 68 acute admissions. 20 MUST scores calculated by ward staff were incorrect: 19 were underscored and 16 received higher risk categorisation on informed scoring. This discrepancy was due to failure to accurately calculate BMI (25%), weight loss (40%) and food intake (45%). 50% of patients were not weighed on admission with many having no weight recorded elsewhere in the notes, causing inaccuracies in BMI scoring that could not be detected by this study.

These results confirm the higher prevalence of malnutrition in the elderly and provide a preliminary profile of various risk factors and the extent to which they pose an associated malnutrition risk. There is a low margin of error when calculating the MUST score in this demographic given their low physiological reserve. We noted over a third of patients had diminished oral intake scoring '0' on MUST. Of these two-thirds had an estimated or recalled weight, which can be particularly unreliable in the elderly and leave malnutrition potentially under-recognised. To safeguard this vulnerable group we suggest modifications to our local policy for assessing the elderly to encourage greater use of objective measures, such as actual weight and collateral history of weight loss, and early interventions, particularly for those with risk factors for malnutrition.

1. Nutrition Screening Survey in the UK and Republic of Ireland. BAPEN 2011.
2. Gibney M, Elia M, Ljungqvist O & Dowsett J (eds) *Clinical Nutrition*. Oxford: Blackwell Publishing; 2005.
3. Ahmed T & Haboubi N (2010) *Clin Interv Aging* 5, 207–216.

*Care of the Elderly services cover those aged 78 and above at this Trust.