

## The impact of 2006 guidance on nutrition support, in clinical outcome measures

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The 2006 National Institute for Health and Clinical Excellence (NICE) guideline 32 on nutrition support suggests that patients at risk of malnutrition should be screened on initial admission to hospital and where appropriate be referred to a dietician<sup>(1)</sup>. The aim of this audit was to compare our current parenteral nutrition (PN) prescribing practice for adult hospitalised patients, against the 2006 NICE guideline on nutrition support<sup>(1)</sup>. The audit focused on initial nutrition screening and early dietician referral of patients with malnutrition or at risk of malnutrition. We investigated whether screening influenced outcome measures of PN administration such as: number of days on PN, total number of PN bags used per patient and length of hospital stay. This prospective audit was conducted over 5 months. Eighty patients were referred to the multi-disciplinary PN team, which consists of chemical pathologists, dietitians and pharmacists. Information was obtained from medical notes, electronic patient records, completed PN prescription charts, dietetic record cards and nursing care plans. Data was collected by the same two healthcare professionals throughout the audit, to ensure the data quality was not affected by investigator differences. The nutritional status of patients was determined based on the 2006 NICE guideline<sup>(1)</sup>:

Patient demographics	
Total number of patients	80
Mean age	60 (sd 2) years
Gender: Male ( <i>n</i> )	63 (78.7%)
Female	17 (21.3%)
Clinical speciality ( <i>n</i> ):	
Medical	21 (26.2%)
Surgical (elective)	49 (61.3%)
Surgical (non-elective)	10 (12.5%)
Wards ( <i>n</i> ): Critical (ICU/HDU)	34 (42.5%)
General	46 (57.5%)
Nutritional assessment ( <i>n</i> )	
Nutritional screening on admission	74 (92.5%)
Patients at risk and malnourished	51 (63.7%)
Patients at risk of re-feeding syndrome	22 (27.5%)
Patients referred to dietician	39/51 (76.5%)

The eighty patients were divided in to two groups as follows: Group A, screened on admission and referred to dietician if malnourished or at risk of malnutrition as defined in 2006 NICE guideline<sup>(1)</sup> prior to commencing on PN; Group B, patients not fulfilling one or more of the NICE criteria:

	Group	
	A	B
Number of patients	55	25
Patients malnourished or at risk ( <i>n</i> )	29 (53%)	18 (72%)
Patients referred to dietician ( <i>n</i> )	29 (100%)	7 (39%)
Wards ( <i>n</i> ): Critical	27 (49%)	7 (28%)
General	28 (51%)	18 (72%)
Number of days nil by mouth prior to PN	2 (sd 1)	4 (sd 2)
Clinical outcome measures		
PN withdrawal reasons ( <i>n</i> ):	37 (67%)	18 (72%)
Tolerating sufficient enteral feeds	8 (15%)	1 (4%)
Transferred to other hospitals/other reasons	0 (0%)	2 (8%)
Suspected line sepsis	10 (18%)	4 (16%)
Died or care withdrawn		
Mean days duration on PN	11 (sd 1)	8 (sd 2)
Mean number of PN bags per patient	10 (sd 1)	10 (sd 2)
Mean days of hospital stay	40 (sd 4)	34 (sd 5)

The audit was a cross sectional study of practice. Patients whose care satisfied the NICE criteria for screening were more likely to be in critical care wards. However, there was no significant difference in any of the outcome measures between groups who satisfied or did not satisfy the 2006 NICE screening criteria.

1. NICE (2006) Clinical Guideline 32. Nutrition Support in Adults: oral nutrition support, enteral tube feeding and parenteral nutrition; London: NICE.