reduction in PN days as result of reduced waiting time for procedures to facilitate EN.

**Conclusion** Implementation of NST resulted in:

12 patients (40%) were successfully prevented from inappropriately starting PN and the median duration of PN reduced by 1 day - A total reduction of **132 less PN days.** 

The number of peripheral PN days was reduced by 189.5 days. A reduction in the number of patients on PN awaiting a procedure to facilitate EN.

A conservative estimate of £20 671.20 was saved as a result.

## Abstract OC-073 Table 1

	2009—2010 (PN team only)	2010—2011 NST (PN&EN team combined)
No of patients referred for PN	105	73
Case notes obtained	75	72
Referrals deemed inappropriate by PN	15 (20%)	29 (40%)
No of inappropriate patients successfully prevented from starting PN (%)	0	12 (40%)
Ratio central: peripheral PN days (%)	69:31	96:4
Peripheral PN days	212.5	23
Median PN days	6	5
Total No of PN days	681	539
No of patients on PN because they were awaiting NG/NJ tube insertion or endoscopic procedure	18 (24%)	2 (3%)

Competing interests None declared.

## **REFERENCES**

- 1. Austin, Stroud. 2007.
- 2. Nutrition Support In Adults. NICE, 2006.
- 3. A Mixed Bag. NCEPOD, 2010.

OC-074

## NUTRITIONAL ASSESSMENT AND OUTCOME IN PATIENTS UNDERGOING EMERGENCY ABDOMINAL SURGERY

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**Introduction** Malnourished Surgical patients are at a significantly greater risk of post-operative complications and death than well-nourished patients. The "Malnutrition Universal Screening Tool" (MUST) is a validated tool for identifying at-risk patients. This paper studies the application of MUST in patients undergoing emergency abdominal surgery and the accuracy of this tool in predicting need for artificial nutritional support and clinical outcome.

**Methods** A prospective cohort study of patients undergoing emergency abdominal surgery at a university surgical unit over a

2-month period was undertaken. MUST data were collected prospectively and *admission* and *highest* (maximum score during admission) MUST scores calculated independently by two researchers. Clinical outcome data were collected.

**Results** 55 patients were included, median age 66. Median *admission* and *highest* MUST scores were 0. Eighteen patients had a highest MUST of  $\geq$ 2. Post-operative complications included ileus (n=9), severe sepsis (n=6) and death (n=10), and were associated with increased *highest* MUST scores (2 vs 0, p=0.005). All patients with MUST  $\geq$ 4 died (n=4). On multivariate analysis, both *admission* and *highest* MUST scores predicted need for artificial nutritional support (p=0.011 and p=0.005). A *highest* MUST score  $\geq$ 4 independently predicted both artificial nutritional support requirement (p<0.001) and death (p<0.001).

**Conclusion** *Admission* MUST scores predict requirement for artificial nutritional support. MUST scores repeated during admission offer utility in predicting both requirement for artificial nutritional support and survival. Clinicians have a responsibility to ensure accurate nutritional assessments are undertaken throughout hospital admission in order to identify those at risk and institute appropriate treatment.

Competing interests None declared.

OC-075

## ASSESSMENT OF NUTRITIONAL STATUS IN PATIENTS WITH CIRRHOSIS: MUST IS NOT A MUST

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**Introduction** The incidence of malnutrition in patients with cirrhosis is high. However, it often goes undetected as many screening tools are based on measurement of body mass index (BMI), which is a poor nutritional marker in this population as patients tend to be centrally obese yet muscularly depleted. The gold standard for the assessment of malnutrition in this population is the Royal Free Hospital Global Assessment (RFH-GA). The Malnutrition Universal Screening Tool (MUST), which is based on BMI, is still used in some UK Liver transplant Units, although it may not be valid in this setting. Hence the aim of this study is to validate the MUST tool against the gold standard RFH-GA for use in patients with cirrhosis.

**Methods** Multicentre validation was undertaken in a cohort of 133 patients, (98 men: 35 women; age 56 [23–73] yr) with cirrhosis across five UK liver transplant units. Nutritional status was screened using the MUST tool and then categorisation of nutritional status was determined by using the RFH-GA. The analysis of descriptive data, cross-tabulation, performance variables, 95% CIs and  $\kappa$  values were calculated using standard methods.  $\kappa$  Values were interpreted according to Altman, 1999.

Abstract OC-075 Table 1 The performance of the MUST utilizing alternative weight adjustments in patients with fluid retention

	Mean (95% CI)					
Modified analysis	Sensitivity	Specificity	PPV	NPV	κ	Strength of agreement
Must	63 (46 to 78)	87 (84 to 90)	69 (51 to 83)	86 (77 to 92)	0.27 (015 to 0.41)	Fair
Mendenhall	71 (54 to 84)	87 (79 to 93)	69 (52 to 82)	88 (80 to 94)	0.30 (0.17 to 0.43)	Fair
Morgan	79 (62 to 90)	87 (79 to 93)	71 (55 to 84)	91 (83 to 96)	0.44 (0.32 to 0.57)	Moderate