patients and other in 13 patients. Seven patients started HPN prior to 2000. Between 2000 and 2011, 61 patients started HPN and 35 patients stopped. Forty-three patients started HPN following gastrointestinal surgery and in 20 of these, HPN was needed because of a surgical complication (nine small bowel fistulae; 10 intra-abdominal sepsis leading to high output stoma; one bowel obstruction). Thirty-five patients stopped HPN. Seventeen patients died – nine of the underlying disease, four of unrelated cause, two of HPN complications and two of both HPN complications and the underlying disease. Seventeen patients stopped HPN after reconstructive surgery, HPN was stopped due to complications/lack of progress in one patient and one patient stopped HPN because of more effective medical treatment. Three other patients reduced their dependence on HPN after surgery (fewer nights per week or lower volume). Of the twenty patients who had HPN because of surgical complication, ten patients stopped HPN because of further surgery, five patients have ongoing HPN with no intention for further surgery, two patients have died (one of the underlying malignancy and the other of unrelated cause) and three patients are likely to have reconstructive surgery in the future. None of the patients who came to reconstructive surgery after a period of HPN died after their surgery.

Conclusion Although the complications of surgery may lead to home parenteral nutrition, surgery may also be useful in reconstruction of the GI tract and this may lead to stopping HPN. It is important that surgeons are involved in the care of HPN patients, as they may be more conscious of the possibility of reconstruction.

Competing interests None declared.

OC-073 CALCULATING THE COST-EFFECTIVENESS OF A NUTRITION SUPPORT TEAM AT A BUSY DISTRICT GENERAL HOSPITAL

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Introduction NICE Nutrition Support In Adults (2006) recommends that all Trusts should have a multidisciplinary Nutrition Support Team (NST). Austin & Stroud (2007) suggest its implementation can improve parenteral nutrition (PN) services and potentially reduce PN usage by up to 25%. At Croydon University Hospital (CUH), a multidisciplinary NST was set up in October 2010, consisting of a Consultant Chemical Pathologist, Consultant Gastroenterologist, dietitians and pharmacists. It combined the previous PN team with the enteral nutrition (EN) team with the aim to optimise the EN of patients thereby reducing inappropriate PN usage as recommended by NCEPOD 2010. We aimed to investigate the use of PN 1 year prior to the implementation of a multidisciplinary NST and compare this to the use of PN 1 year post-implementation at CUH.

Methods Case notes of patients who had received PN at CUH between 1st October 2009 and 30th September 2010 were obtained and a retrospective analysis of each patient's duration on PN was made and compared to prospective data, obtained from the start of the introduction of a multidisciplinary NST on 1st October 2010, until September 30th 2011. The final cost of PN was obtained from the hospital pharmacy and cost-savings were calculated.

Results Data obtained before and after implementation of NST: The total cost of PN per day is £156.60. The median number of days was reduced by 1 day. In the year following the introduction of the NST, 60 patients received PN (saving 60 days of PN), 12 patients were successfully prevented from receiving PN (saving 72 days of PN). The total number of PN days saved was 132, resulting in a total cost saving of £20 671.20. This does not take into consideration the

OC-072 ARE SURGEONS A POSITIVE OR NEGATIVE INFLUENCE ON THE HPN POPULATION?

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Introduction The aim of this study was to establish the number of patients in whom surgery led to Home Parenteral Nutrition (HPN) in comparison to the number in whom surgery led to stopping HPN.

Methods Data relating to HPN patients has been collected prospectively in our hospital since 2000 as part of the Scottish Managed Clinical Network for HPN. Data held include demographics, underlying disease, previous surgery, and start and stop dates for HPN with the underlying reasons. This data was analysed in January 2011.

Results Sixty eight patients (26M: 42F; median age at start 53 years: range 16–78 years) had HPN supervised by our hospital during 11 years. The underlying disease was Crohn's disease in 26 patients, mesenteric ischaemia in 12 patients, malignancy in seven patients, motility disorders in eight patients, radiation enteritis in seven

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.

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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 ≥ 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 ≥ 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 ≥ 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 κ values were calculated using standard methods. κ 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

Modified analysis	Mean (95% CI)					Strength of agreement
	Sensitivity	Specificity	PPV	NPV	κ	
Must	63 (46 to 78)	87 (84 to 90)	69 (51 to 83)	86 (77 to 92)	0.27 (0.15 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