

Parenteral Nutrition; comparison to NCEPOD and improvements one year on

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In 2010, the National Confidential Enquiry into Patient Outcome and Death (NCEPOD)⁽¹⁾ published its report ‘A Mixed Bag’ which evaluated the care given to patients receiving parenteral nutrition (PN) in England, Wales, Northern Ireland and the Channel Islands. It found that only 19% of in-patients received good PN-related care. All patients receiving PN at The Royal London Hospital (RLH) are managed by the multidisciplinary Nutrition Support Team (NST) who compared their performance against the findings of the report.

	NCEPOD, 2010	RLH (Nov 2010–Feb 2011)	
Number of adult patients	877	47	
Mean age (range)	65 (19–95)	53 (18–83)	
Top 3 specialities under which PN administered	General Surgery	193 (22%)	Hepatobiliary surgery 17 (36%)
	Intensive care	175 (20%)	Colorectal Surgery 13 (28%)
	Colorectal	158 (18%)	Medical Gastroenterology 5 (11%)
Top 3 indications for PN	Post-operative ileus	140 (16%)	Post-operative ileus 16 (34%)
	Post-surgical complication	88 (10%)	Intestinal failure secondary to Pancreatitis 8 (17%)
	Obstruction	88 (10%)	Enterocutaneous fistula 6 (13%)
Mean duration of PN(range)	12.2 (1–276)	12.8 (1–76)	
Less than 3 days	88 (10%)	3 (6%)	

Table 1 – data comparison; NCEPOD versus RLH.

Although RLH NST routine data collection was insufficient for direct comparison with all details of the NCEPOD report and yielded a small data set, RLH patients were younger (mean 53 vs. 65 years) and PN use appeared more appropriate (inappropriate 6% vs. 10%). Duration of PN was similar between the groups. RLH is a specialist centre for hepatobiliary surgery and therefore treats complex patients, which explains the high number of PN patients in this speciality (36%) and the high percentage of patients started on PN as a result of Intestinal Failure secondary to pancreatitis (17%). The main indication for PN in both data sets was post-operative ileus.

Some shortfalls in practice including inadequate communication between referring team and NST, the availability of ‘off-the-shelf’ bags containing no vitamins or trace elements and inconsistent documentation in medical notes was identified. As a result of the comparison of RLH PN practice versus NCEPOD the following changes have been implemented:

1. A database has been developed to collect all PN-relevant information for ongoing service evaluation and improvement.
2. PN referrals must be made by a doctor from the referring team with a clear explanation of the indication for and likely duration of PN.
3. The NST attend some surgical ward rounds, xray and surgical meetings to enhance the channels of communication.
4. Emergency ‘off-the-shelf’ PN bags (without vitamins/trace elements) are no longer available except on the Intensive Care Unit at weekends.
5. Documentation in the medical notes has been standardised through the use of a NST template which ensures all appropriate assessment and monitoring is documented.

Comparison with NCEPOD found PN provision at RLH to be a high quality service but highlighted some areas for improvement including better prospective data collection for further service evaluation and improvement.

1. NCEPOD. *A Mixed Bag: The 2010 report of the National Confidential Enquiry into Parenteral Nutrition*. London: NCEPOD, 2010.