

NUTRITIONAL SCREENING FOR PICU

Introduction:

PYMS (Paediatric Yorkhill Malnutrition Screening) tool has been implemented at SGH on the paediatric wards, to identify those patients at risk of malnutrition and ensure appropriate referral to the dietitian for assessment and treatment.

The PYMS tool has not been validated for critically ill children.¹ The tool requires an accurate measured weight on the day that the tool is completed. This is currently not possible in most ITU patients on PICU, as they are unstable and are often fluid overloaded thereby making weighing practically difficult and the weights inaccurate.

Screening procedure for PICU:

We aim to complete the tool on patients once they become HDU (high dependency unit) patients and when they are no longer retaining fluid. The unit has a blanket dietetic referral and the dietitian aims to screen patients at least twice a week. This blanket referral policy supersedes the PYMS tool for patients on PICU (whether ITU or HDU).

If a HDU patient scores 2 or above, the nursing staff should contact the dietitian. The dietitian will then decide on the appropriateness of dietetic intervention at that time (i.e. they may be NBM for theatre, they may already have a local community dietitian who is addressing the issue, the issue may be chronic and better dealt with on the ward or once the patient is out of hospital).

The tool is only validated for patients over the age of 1 year. For infants under 1 year of age, they should still be weighed and measured once possible and the growth plotted on the growth chart. If there are concerns that the patient is not thriving, the dietitian should be informed.

References:

1. Gerasimidis K et al, 'A four-stage evaluation of the Paediatric Yorkhill Malnutrition Score in a tertiary paediatric hospital and a district general hospital.' Br J Nutr. 2010 Sep;104 (5):751-6.

Appendix A

	HDU	ITU
Nutrition Assessment	<p>Weigh and length patient & complete the PYMS Tool (in patients over 1 year) or plot growth on the growth chart (infants) within the first 24 hours of admission or after 24 hours of extubation (or pre-discharge if oedematous)</p> <ul style="list-style-type: none"> • If patient scores ≥ 2 refer to the dietitian • If < 2 screen weekly • If not suitable for oral feeding, then contact the dietitian 	<p>Dietitian to screen the unit at least twice a week. Nursing Staff to refer according to criteria below. If the patient is enterally fed at home, obtain information about their most recent feed regime and feed type. Weight and height/length should be measured on the day of admission (weight can be estimated if patient is too unstable) and inputted on iClip. Thereafter the patient should be weighed once a week.</p>
Nutrition to be provided	Oral intake or usual enteral feed if appropriate	Start enteral feed in first 6 hours of admission as per protocol, unless otherwise stated by the medical team.
Criteria for referral to the dietitian	<ul style="list-style-type: none"> • New enteral feed started, especially if going to the ward and feeds still being established. • PYMS > 2 • Patients on the ketogenic diet or requiring feed to be made in the milk kitchen 	<ul style="list-style-type: none"> • Patients intubated for > 48 hours and likely to remain intubated for at least another 24 hours. Dietitian will ensure these longer ventilated patients are not being over/under fed. • Patients with renal impairment, especially if on a filter • Any history of food allergies • Issues with feed tolerance or malabsorption (i.e. cystic fibrosis, hyperbilirubinaemia) • Patients on the ketogenic diet. • Patients who are usually enterally fed • Other: chylothorax, nutritional metabolic disorders