Background to the audit project

Following local analysis of prescribing patterns and budgets and the publishing of the guidelines and recommendations from NICE it was recognised that a practice development strategy needed to be in place to develop skills and knowledge around malnutrition, its detection and treatment. Feedback from the Continuining Health Care nursing team confirmed that implementation of a validated malnutrition screening tool was not always in place.

The development of practice and implementation of evidence based guidelines in practice is complex and:

“…….is a continuous process of improvement towards increased effectiveness in patient centred care. This is brought about by helping healthcare teams to develop their knowledge and skills and to transform the culture and context of care.” Garbett and McCormack 2002:29)

As the research has identified high prevalence rates in elderly patients an evaluation of current practice following the 2 year programme was required.

Brief Literature review

The National Collaborating Centre for Acute Care (NCCAC 2006) on behalf of the National Clinical Institute for Clinical Excellence published guidelines to improve the practice of nutrition support by providing evidence and information for all health care professionals, patients and their carers. The identification of malnutrition at an early stage provides the opportunity to initiate the best form of treatment and nutritional support. Nutritional Screening and its early identification of patients can identify patients who may be overlooked and assist in establishing reliable pathways of care for patients with undernutrition (Rashidian et al 2005). This is an essential first step in the
management of patients' nutritional care (Powell-Tuck, 2007; NCCAC, 2006; Better Hospital Food, 2001).

From the literature, studies suggest that the routine assessment of height and weight in the hospital setting does not occur despite the recommendation to estimate and record Body Mass Index (BMI) (Campbell et al 2002). Malnutrition and its impact on clinical outcome may be underestimated particularly in hospitalised elderly patients where it is considered that height and weight cannot be measured (Stratton et al 2006). Although many valuable tools have been developed, validated and used the, Malnutrition Universal Screening Tool (‘MUST’) (Todorovic et al 2003) is a validated tool that can establish malnutrition risk in all adult patients and even in those in whom weight and/or height cannot be measured (Stratton et al 2006). An evaluation using the ‘MUST’ risk categorization found a malnutrition prevalence rate of 58% and for those who were screened using ‘MUST’ subjective criteria (no measured or recalled weight) had a prevalence rate of 89%. Perry (2009) also recommended ‘MUST’ as a screening tool through evaluating its characteristics, validity and reliability.

As part of the LHB’s practice development strategy a programme to implement and support this evidence based practice was initiated.

Training and Development Programme

Using a partnership approach between the NHS trust and Conwy Local Health Board a training programme commenced in November 2006 enabling registered nurses to access training for implementation of the validated ‘MUST’ tool and for managing dysphagia. The training was facilitated by the LHB practice development nurse team and delivered by the partnership approach of the dietician and the speech and language therapist. In 2006 and 2007 approximately 90 care home staff accessed 4 half day training sessions providing training on use of the ‘Malnutrition Universal Screening tool’ (MUST) National Collaborating Centre for Acute Care (2006). This programme consisted of mainly Registered nurses. In 2008, this programme was extended to include carers. It is anticipated that a similar
number of carers and Registered Nurses will have accessed training this year due to the extended programme consisting of 5 day half training sessions facilitated to cope with the interest. The LHB and the trust as part of SCEP currently fund a whole time dietician’s post but this is under threat from March 2009 and may become a barrier to continuing this essential programme.

The training numbers below do not include input and training provided in house by the dietician.

### NUMBERS ATTENDING LHB ‘MUST’ TRAINING

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009(Feb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std</td>
<td>43</td>
<td>51</td>
<td>42</td>
<td>36</td>
</tr>
</tbody>
</table>

**MUST Audit tool**

As the research evidence confirms, clinical care processes have an influence on outcome. According to Rawlins and Hine (2002) measurement of the process of care generally provides a direct measure of the quality of care. The audit tool was designed to be simple and unambiguous (Crombie et al 1995) and developed using the audit criteria as suggested by Rawlins and Hine(2002) who suggest that the quality of care provided by an organization can be assessed using criteria incorporating the following recommendations:

- Explicit statements that define what is being measured:
- Represent elements of care that can be measured objectively.

To be valid and lead to improvements in care they need to be:

- Based on evidence
- Related to important aspects of care
- Measurable

**The standard set was:**

“80% of all adult patients will have nutritional assessment screening to identify malnutrition, risk of malnutrition and obesity as recommended by National Institute of Clinical Excellence.”
Data Collection

A letter was sent to all the nursing homes informing that the LHB would be auditing the nutritional screening process within care homes within the locality (Appendix 1).

From 1\textsuperscript{st} September 2008 to 31\textsuperscript{st} December 2008 at each Continuing Health Care Review, the Continuing Health Care Nurse team completed an anonymous audit questionnaire (Appendix 2). A total of 30 care homes were included in the audit and selected due to patients requiring a review within this time frame. No patient identifiable information was recorded and the identification of the care home was coded for reporting purposes to preserve anonymity and confidentiality of patients and the care home.

The audit tool was piloted and then amended following review. See Appendix 3 for scoring tool.

The following results were found:

![Graph to show average total score for the audit](image-url)

**Average MUST AUDIT Results**

- Marine Court
- Plas Gwynfa
- Treflys
- Abbey
- Bryn Marl
- Cartref Bryn Uchaf
- Eglwys
- Tandkerwen
- Eryl Fryn
- Cartref y Borth
- Pembroke Lodge
- Tyn Llan
- Eithnasog
- Southern House
- The Old Vicarage
- Priory Grange
Compliance

182 audit questionnaires were completed:

- 57% of the audit questionnaires showed over > 80% compliance with the standard

- 43% of the audit questionnaires demonstrated < 80% compliance and did not reach the standard.

- The total average score for the audit standard was 79%.

Pie Chart showing Compliance and Non compliance with the standard

![Pie Chart](image_url)
Recording of Height and Weight on admission

From the 43.4% non compliant questionnaires:

- 79.2% had not had height and weight recorded on admission to the care home.

It is recognised that some patients may have been admitted some years ago but nevertheless re-enforces the research evidence suggesting that the routine assessment of height and weight in the hospital (care) setting does not occur despite recommendation to estimate and record Body Mass Index (BMI) (Campbell 2002). The research evidence states that there is frequent omission of nutritional screening when patients first contact health services. This is an important component of the fundamentals of nursing care and basic nutritional screening is an essential first step in the management of patients' nutritional care (Powell-Tuck, 2007; NCCAC, 2006; Better Hospital Food, 2001).

Proportion of high and medium risk patients

- 32% of the non compliant questionnaires were assessed as high and medium risk.
• 22% of the compliant questionnaires were assessed as high and medium risk.

Implementation of the ‘MUST’ tool

• Approximately 15% of the non compliant questionnaires were identified as using a tool other than MUST or identified as not using MUST correctly.

Any anomalies or perceived risk to the patient while conducting the audit was highlighted to the care home and addressed.

Conclusions and Recommendations

• There will be feedback and recommendations to individual homes on the results of the audit. (Appendix 4)

• The training programme for the implementation of the validated ‘MUST’ as a nutritional screening tool be continued as an annual rolling programme for Registered Nurses and Health Care Support Workers.

• Although not a frequent problem the nutritional management of patients with a high Body Mass Index did not appear to be clear and professional judgement was applied. It is suggested/recommended that in conjunction with the dietetic team a management pathway be developed

• The audit tool to be circulated to the nursing homes in the locality with a recommendation that an audit of the process of nutritional screening is carried out by care homes on a regular basis.

• For any future programmes for the implementation of evidence based guidelines it is recommended that an audit be completed prior to the commencement of a development and training programme. In
hindsight, a pre and post audit evaluation of this programme would have provided valuable information.

- The audit project was only possible through the team working of the Conwy LHB nursing directorate, the partnership working and goodwill of the trust, the cooperation of the care homes and the recognition that each individual had a contribution to play in producing this audit.
REFERENCES:


Powell-Tuck, J. (2007) (Chair) for British Association for Parenteral and Enteral Nutrition. Organisation of Nutritional Support in Hospitals


