ASSESSING THE BENEFITS OF A MALNUTRITION SCREENING TOOL

This is a summary: the full paper can be accessed at nursingtimes.net

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A significant proportion of patients admitted to hospital are at risk of malnutrition. This study aimed to audit use of the Malnutrition Universal Screening Tool (MUST). A core project group set up a pilot to trial the tool’s use, followed by full implementation in an acute hospital. Two audits were then carried out – the first revealed a significant increase in dietetic referrals as a result of using the tool, indicating an increase in the number of patients identified as at risk of malnutrition, while the second showed continued improvements in carrying out nutritional screening. This study shows that all patients should be screened for malnutrition on admission and appropriate treatment initiated.

Nutrition is an essential part of patient care that is often neglected or overlooked. For most people, nutritional needs are met by an adequate diet but some patients are unable to meet their requirements.

Age Concern (2006) argued that it is a ‘national scandal’ that six out of ten older people are at risk of becoming malnourished, or their situation deteriorating, while they are in hospital. Patients who are malnourished stay in hospital for longer, are three times more likely to develop complications during their surgery, and have a higher mortality rate than those who are well fed (Age Concern, 2006).

The importance of nutrition was highlighted by the Essence of Care initiative (Modernisation Agency, 2003). It features benchmarks that cover eight areas of care, one of which focuses on food and nutrition. A literature review was carried out for this study – for details see nursingtimes.net.

**THE MUST TOOL**

The British Association for Parenteral and Enteral Nutrition’s Malnutrition Advisory Group launched the Malnutrition Universal Screening Tool (MUST) in 2003, in response to national concerns about the issue in hospitals. An accompanying report to launch the tool examined the need to screen for malnutrition in clinical practice, set out the criteria to be fulfilled and described the development and use of the tool for adults (Malnutrition Advisory Group, 2003).

MUST is a validated nutritional screening tool that may be applied to each patient admitted to hospital with the goal of targeting any patient, regardless of age, who may be at risk of malnutrition.

I was keen to oversee the implementation of MUST, following consultation with nursing staff and was identified as the project leader. Key elements that needed to be addressed were weight loss/recent starvation, and current BMI and likely changes. The scoring system showed whether a patient was low, medium or high risk.

**AIM**

This research project aimed to:

- Pilot the screening tool based on those guidelines that were set out by BAPEN’s Malnutrition Advisory Group;
- Identify people at risk, according to the tool’s scoring system;
- Develop a care plan for patients at medium and high risk within the tool;
- Provide weekly, accurate documentation of nutritional status by recording each patient’s weight and BMI on their care plan;
- Ensure prompt referral to dietetic departments as well as speech and language departments;
- Promote evidence-based practice and deliver quality care to all patients.

**METHOD**

Initially, a core group was established involving a cross-section of disciplines, such as nursing, catering, hotel/domestic services, dietetics, and speech and language. The group used the Essence of Care guidelines and agreed best practice using the specific indicators for each area, as set out by the Modernisation Agency (2003).

A scoring system was used to establish best and worst practice, with A representing worst practice and E depicting best practice. The Essence of Care document features a total of 10 factors relating to food and nutrition but only the following

**IMPLICATIONS FOR PRACTICE**

The following are some recommendations from the study to ensure best practice:

- All hospital trusts should have a nutrition working group;
- Every ward should identify members of staff to act as link nurses for food and nutrition;
- Support and commitment should be gained from all disciplines to ensure successful implementation of the screening tool;
- Protected mealtimes should be implemented in all areas, and signs clearly displayed to inform visitors and staff;
- Red-tray systems or an alternative should be implemented to identify patients at high risk of malnutrition;
- Staff need to be aware of their roles and responsibilities regarding nutrition;
- All patients should be screened;
- Referrals to dietetic departments must be prompt (within 24 hours of admission);
- Staff should be encouraged to take ownership of the screening tool to ensure accurate documentation.
two are directly relevant to MUST:
- Screening and assessment to identify patients’ nutritional needs;
- Planning, implementation and evaluation of care for those patients who require a nutritional assessment.

The group discussed these factors and the care that needed to be implemented. An action plan was devised, delivered and re-evaluated to ensure high-quality care. The group then agreed on the design of the core care plan that was to be incorporated into the screening tool, and also agreed on an agenda. We sought views regarding documentation and implementation of MUST through questionnaires. These were audited and the core care plan was then revised on several occasions.

A pilot scheme was set up in one ward initially and comments were sought from members of staff regarding MUST’s effectiveness. Protected mealtimes were implemented in the pilot ward – discussions took place with all disciplines, especially medical staff, as this was a popular time for them to carry out one of their ward rounds. The project group then arranged training for all staff in the hospital site.

RESULTS
These are the main findings:
- Two hundred patients were screened initially, using MUST;
- Ages of patients involved ranged from 16–98 years;
- All specialties were involved;
- A total of 163 dietetic referrals were made in a six-month period;
- There was a rise of 30–40% in dietetic referrals;
- A third (n=65, 33%) of these patients were found to be at high risk of malnutrition, with a BMI of <18.5;
- Eighteen patients (9%) were at medium risk of malnutrition;
- One hundred and seventeen patients (59%) were at low risk of malnutrition.

Every patient was screened on admission to ascertain their nutritional status. Previously, a dietetic referral was carried out if a patient’s Braden score was ≤18, or if there was obvious weight loss or concern. The tool’s implementation saw a significant increase in dietetic referrals and therefore an increase in the number of patients who were at risk of malnutrition being identified.

As a result of the increase in dietetic referrals, the trust has employed extra dietetic staff in the form of students to assist the two full-time dietitians. A more recent audit carried out from August 2006 to May 2007 continued to show an improvement in the levels of nutritional screening.

The results showed:
- Two hundred and fifty-six patients were screened on admission;
- Ninety-nine patients (39%) were referred to the dietitian.

All patients are re-screened weekly and their weight is recorded on the core care plan, which is readily available for all staff to see. At the time of writing we noted a steady improvement in patients’ weight gain but an audit would need to be carried out to gather accurate data.

We have implemented a wide range of changes to practice at ward level, including protected mealtimes in all wards, food being available out of hours and an improved choice of menu for patients. For full details see nursingtimes.net.

The initiative brought about a vast improvement in the identification of patients who were at risk of malnutrition, and care delivery is continually improving. The scheme was relatively inexpensive to implement, as meetings were held during normal working hours. The main cost was typing the draft copy/final copy of the tool and photocopying it for use in all wards. MUST was also audited on a regular basis to ensure that it is being implemented accurately. It has proven to be invaluable in identifying those patients who are at risk of either malnutrition or undernutrition. Dietetic referrals continue to increase and nutritional status is treated as a result.

Before the screening tool was introduced at the hospital, nutritional status was recognised by the patient’s general condition, Braden score, appearance and eating habits. Now, a tool is used to assist all staff in detecting malnutrition in patients where previously it may have been missed. The tool also acts as a guide for new staff, enabling them to follow specific guidelines and implement quality care.

All hospitals should have a nutritional screening tool in place – it not only serves to safeguard patients but also identifies areas of practice that may require changing. Change can be frightening and time-consuming but it can also be extremely satisfying and heartening to see patients receive the care they rightly deserve.

DISCUSSION
The tool’s implementation was a new initiative that required commitment, time, energy and support from both colleagues and management. The problems that were encountered included ensuring protected time for the project leader, maintaining the momentum, securing staff engagement, agreeing on the final draft of the care plan, and implementing protected mealtimes.

MUST is now implemented in all areas of the hospital successfully. Use of the tool is audited every six months and all wards are visited on a regular basis to ensure that it is being implemented accurately. It has proven to be invaluable in identifying those patients who are at risk of either malnutrition or undernutrition. Dietetic referrals continue to increase and nutritional status is treated as a result.

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CONCLUSION
It is the responsibility of all hospital trusts to implement, evaluate and audit their core care plan as well as MUST. However, the aim should remain unchanged – all patients should be screened on admission for malnutrition and treatment should be initiated and delivered to the highest possible standard.

REFERENCES
