NUTRITION
assessment and referral in
the care of adults in hospital
best practice statement
The Nursing and Midwifery Practice Development Unit

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Introduction

The Nursing and Midwifery Practice Development Unit (NMPDU) was established in January 2000 to support the identification, dissemination and implementation of best practice across Scotland.

The NMPDU has a responsibility for "ensuring that role and practice development in Nursing, Midwifery and Health Visiting is taken forward across Scotland in a planned and cohesive manner; that benefits gained from excellent practice in any area - clinical or geographical - might be extended systematically across Scotland to the benefit of patients, staff and the NHS as a whole" (Scottish Office 1997).

One of the key aims of the NMPDU is to identify areas of nursing and midwifery practice amenable to the development of 'best practice statements'.

Background to best practice statements

While many examples of clinical guidelines exist there is a lack of reliable statements focusing specifically on nursing and midwifery practice.

The development of best practice statements reflects the current emphasis on delivering care that is patient centred, cost-effective and fair, and will attempt to reduce existing variations in practice. The common practice that should follow their implementation will promote comparable standards of care for patients wherever they access services.

What is a best practice statement?

A best practice statement is a statement to describe best and achievable practice in a specific area of care. The term 'best practice' reflects the NMPDU's commitment to sharing local excellence at national level. Best practice statements are underpinned by a number of shared principles (pii).
Key principles of best practice statements

• best practice statements are intended to guide practice and promote a consistent and cohesive approach to care

• best practice statements are primarily intended for use by registered nurses, midwives and the staff who support them, but they may contribute to multidisciplinary working and other members of the health care team may find them helpful

• statements are derived from the best available evidence at the time they are produced, recognising that levels and types of evidence vary

• information is gathered from a broad range of sources in order to identify existing or previous initiatives at local and national level, incorporate work of a qualitative and quantitative nature and establish consensus

• statements are targeted at practitioners, using language that is accessible and meaningful

• consultation with relevant organisations and individuals is undertaken

• statements will be reviewed and updated every 3 years

• responsibility for implementation of statements will rest at local level

• key sources of evidence and available resources are provided
The Nursing and Midwifery Practice Development Unit

Key stages in the development of best practice statements:

A systematic process has been followed as outlined below. The development process began in August 2001 and was led by a secondee from clinical practice with support from the NMPDU, a working group, and a multi-disciplinary reference group of clinical and academic staff representing NHS Trusts across Scotland.

Select topic
   Recruit secondee and group members
   Gather supporting evidence and examples from practice
   Review evidence for relevance to practice
   Draft statement
   Consultation process
   Revise statement
   Launch statement
   Review and update statement (3 yearly)
Who was involved in developing the statement?

**Project Leader:**
Ms. Gill Harris  
seconded from Highland Acute Hospitals NHS Trust

**Steering group:**

Mrs. Tina Chapman  
Head of Occupational Therapy Services,  
Fife Acute Hospitals NHS Trust  
(National Paramedic Advisory Committee)

Ms. Judith Hendry  
Vice-Chair Scottish Dietetic Managers Group

Dr. Cathy Higginson  
Research Specialist, Nutrition,  
Health Education Board Scotland

Mrs. Marion McGhee  
Project Manager  
Argyll & Clyde Acute Hospitals NHS Trust

Dr. Ruth McKee  
Consultant Surgeon  
North Glasgow Hospitals NHS Trust

Ms. Jeanette Morrison  
Ward Sister, West Lothian Healthcare NHS Trust

Professor Chris Pennington  
Consultant Physician  
Tayside University Hospitals NHS Trust

Dr. Rosemary Richardson  
Director  
Partnership in Active Continuous Education  
Queen Margaret University College, Edinburgh

Ms. Fiona Steven  
Chief Dietitian  
Lothian University Hospitals NHS Trust
The Nursing and Midwifery Practice Development Unit

Nurses reference group
Sandra Armstrong Borders General Hospital NHS Trust
Caroline Draid West Lothian Healthcare NHS Trust
Trish Elder Lothian University Hospitals NHS Trust
Elizabeth Finlayson Lothian University Hospitals NHS Trust
Fay Forrest Forth Valley Acute Hospitals NHS Trust
Aileen Gallacher Highland Acute Hospitals NHS Trust
Sandra Lang Lanarkshire Acute Hospitals NHS Trust
Tricia McDonald Grampian University Hospitals NHS Trust
Eleanor McGough Lanarkshire Acute Hospitals NHS Trust
Carol Muir Nutrition Nurse Lothian University Hospitals NHS Trust
Catherine Morrison Western Isles Health Unit
Rosemary Paterson GI Nurse Practitioner Lothian University Hospitals NHS Trust
Susan Pike Borders General Hospital NHS Trust
Margaret Rettie South Glasgow University Hospitals NHS Trust
May Shaw Fife Acute Hospitals NHS Trust

NMPDU network members:
Individual link nurses / midwives from every Trust in Scotland; representatives from academic Departments of Nursing / Midwifery and the Nursing Research Initiative for Scotland (NRIS).

NMPDU support team:
Bette Baillie Secretary
Penny Bond Senior Nurse
Gillian McCracken Communications and Information Officer
How can the statement be used?

The recommended best practice statement can be used in a variety of ways, although primarily it is intended to serve as a guide to good practice and promote a consistent and cohesive approach to care. The statement is intended to be realistic but challenging and can be used:

• as a basis for developing and improving care

• to stimulate learning amongst nursing teams

• to promote effective interdisciplinary team working

• to determine whether a quality service is being provided

• to stimulate ideas and priorities for nursing research

Selection of topics

The identification of priorities for the development of best practice statements followed an extensive consultation process involving the NMPDU link nurse / midwife network, the Directors of Nursing group and other organisations. The following criteria guided the selection of topics:

• the selection of areas of broad significance to nursing / midwifery as a whole rather than being speciality specific. This may facilitate cross-boundary working between specialities, promote greater uptake of statements and have a wider impact on patient care

• the identification of areas where there is evidence of variation in practice affecting patient care

• the use of research recommendations to identify topics for the development of statements

• a focus on practice issues rather than service provision
Best Practice Statement - Nutritional Assessment and Referral in the Care of Adults in Hospital

This best practice statement has been produced by the Nursing and Midwifery Practice Development Unit to offer guidance to nurses, midwives and health visitors on best practice relating to nutritional assessment and referral in the care of adults in hospital.

Format of statement

The statement is divided into five sections covering:
• admission to hospital
• nursing management of nutritional care
• screening and documentation
• criteria for nutritional referrals
• education and training

Each section contains a table corresponding to the what, why and how of best practice i.e. summarising the statement, the reason for the statement and how to achieve the statement or to demonstrate it is being achieved.
## SECTION 1. Admission to hospital

<table>
<thead>
<tr>
<th>Statement</th>
<th>Reason for Statement</th>
<th>How to demonstrate statement is being achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>All adult patients admitted to hospital settings receive nutritional care, appropriate to their individual needs.</td>
<td>Malnutrition in the UK is an important public health problem, which is estimated to affect between 15% and 40% of hospital admissions and at least two million adults in the UK, (Malnutrition Advisory Group 2000). Maintenance of nutrition is important for physical and psychological well being. ‘When illness or injury occur, nutrition is an essential factor in promoting healing and reinforcing resistance to infection’ (Cortis 1997).</td>
<td>Records of initial nursing assessment include reference to nutritional status and identify individual need (see p.3). Records demonstrate that registered nurses explore with patients* factors which affect their dietary intake and issues that are important to them e.g. cultural and religious aspects of nutrition, and personal preferences. Registered nurses have specific knowledge of the relevant dietary requirements of patients within their clinical area.</td>
</tr>
<tr>
<td>All patients are provided with nutritional advice and support that is appropriate and consistent with their needs.</td>
<td>All patients have the right to information that will support them in making decisions relating to their nutritional needs.</td>
<td>Appropriate information** is available in a variety of accessible formats e.g. written, audio, pictorial to support verbal discussion with patient.</td>
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</tbody>
</table>

* Carers are involved in discussion of nutritional needs where appropriate

** Contact local dietetic department for examples of information they would recommend
### SECTION 2: Nursing management of nutritional care

<table>
<thead>
<tr>
<th>Statement</th>
<th>Reason for Statement</th>
<th>How to demonstrate statement is being achieved</th>
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</thead>
<tbody>
<tr>
<td>Nurses manage the provision of food and drink as a vital part of the care of patients in their clinical area.</td>
<td>Nurses have a key role to play in promoting and maintaining good nutritional care through managing mealtimes and enhancing the mealtime environment.</td>
<td>All patients have the opportunity to select meals from menu cards that they can read and understand. Assistance with choosing meals is provided if required. Meals are selected as close to mealtimes as possible. Patients have access to fresh water to drink at all times unless contraindicated by their clinical condition. Assistance is available to any patient who requires help with feeding/drinking. There is nursing representation at local and strategic level to develop systems and procedures to support the complex issue of food and drink provision within hospital. Nurses work collaboratively with catering, dietetic and domestic staff to enhance the provision of food and drink to patients in hospital. Mealtimes are supervised and prioritised to minimise disruptions that may adversely affect food intake e.g. treatments and ward rounds.</td>
</tr>
</tbody>
</table>

Registered nurses ensure that the environment where patients eat is conducive to the enjoyment of meals.
### SECTION 3. Nutritional screening and documentation

**Key points:**

i. Nutritional screening is a simple and rapid process of identifying clinical characteristics known to be associated with malnutrition. The screening process is intended for use prior to a more detailed nutritional assessment. Nutritional screening is incorporated within a wider process of nursing assessment.

ii. Nutritional assessment is a comprehensive process of identifying and evaluating the nutritional status of an individual using appropriate measurable methods in order to quantify impairment of nutritional status.

iii. Initial screening of patients should take place as soon as possible after admission to hospital.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Reason for Statement</th>
<th>How to demonstrate statement is being achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients have their nutritional status screened within 24 - 48 hours of admission to ward area by a registered nurse.</td>
<td>To identify patients who are at risk and prevent deterioration in nutritional status whilst in hospital.</td>
<td>All nurses have access to and use a nutritional screening tool. All tools include criteria from figure 1 (p.4) and scores that indicate action to be taken.</td>
</tr>
<tr>
<td></td>
<td>Undemutrition is frequently not recognised and treated in hospital in-patients (Elia 2000)</td>
<td>Risk score is documented in the patient record.</td>
</tr>
<tr>
<td></td>
<td>To provide baseline observations.</td>
<td>The patient record documents the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the patient’s ability to take food orally</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the presence of severe vomiting and/or diarrhoea</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the patient's appetite status, e.g. appetite nil or virtually nil</td>
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<tr>
<td></td>
<td></td>
<td>• problems handling food or help required with feeding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• involuntary/unintentional weight loss (last three months) including indicators such as loose clothing, rings or dentures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• food allergies/special diet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• BMI &lt; 18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• personal likes/dislikes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• any relevant medical condition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weight (kg) and height (cm) are clearly recorded in documentation</td>
</tr>
</tbody>
</table>

**Key challenges:**

i. Carrying out nutritional screening of patients within the specified time frame. A patient’s weight recorded in their health records within 3 months prior to their admission may be acceptable if there has been no change in their nutritional status.
FIGURE 1: Key elements of nutritional screening

It is recognised that there are a number of well-developed nutritional screening tools that when used in their entirety are reliable and client group specific. A method of scoring should be in place as indicated by the tool selected in order to identify patients who are:

- **Low risk** - no immediate action; repeat screening at regular intervals to detect any change
- **Moderate risk** - needs ongoing monitoring to detect any change
- **High risk** - requires intervention and ongoing monitoring

The criteria below represent the professional consensus of the working group and the nurses reference group regarding essential criteria for a screening tool. These have been developed by comparing nutritional screening tools from across Scotland.

Criteria in the nutrition screening tool should include

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight loss in last three months</td>
<td>e.g. underweight, unintentional weight loss &gt; 6kg</td>
</tr>
<tr>
<td>Body Mass Index (BMI)</td>
<td>e.g. 18-20</td>
</tr>
<tr>
<td>Ability to eat/absorb food</td>
<td>e.g. unable to take food orally, swallowing impairment, unable to swallow (complete dysphagia).</td>
</tr>
<tr>
<td></td>
<td>Severe vomiting and / or diarrhoea, malabsorption</td>
</tr>
<tr>
<td>Appetite</td>
<td>e.g. appetite nil or virtually nil, unable to eat. NBM (no food &gt;4 consecutive meals)</td>
</tr>
<tr>
<td>Stress Factors</td>
<td>e.g. major surgery, chronic illness, severe infection, sepsis, cancer, burns &gt;15%, multiple injuries</td>
</tr>
<tr>
<td>Physical condition</td>
<td>e.g. diabetes, cardiac failure</td>
</tr>
<tr>
<td>Mental condition</td>
<td>e.g. comatose, confused, depressed, uncooperative, eating disorder, psychosis</td>
</tr>
</tbody>
</table>

Examples of scoring tools available: Malnutrition Advisory Group (MAG) screening tool, Burton score, Birmingham Heartlands Hospital Nutritional Screening Tool, Falkirk & District Royal Infirmary Assessment Form (see recommended resources p.10 for more detail).
### SECTION 3 (continued): Nutritional screening and documentation

<table>
<thead>
<tr>
<th>Statement</th>
<th>Reason for Statement</th>
<th>How to demonstrate statement is being achieved</th>
</tr>
</thead>
</table>
| Repeat screening takes place at regular intervals.                        | Screening on an ongoing basis reflects the fact that nutritional needs may change over time. | The nursing care plan includes date for repeat screening. * \  
Information relating to the patient’s nutritional needs and any interventions is reflected in the patient records throughout their hospital stay. \  
Discharge documentation incorporates a summary of nutritional status; any special dietary requirement at time of discharge and any community/outpatient follow up if required. \  
Any changes identified as a result of repeat screening are recorded. \  
Equipment is in place, accessible, in working order and there is a record of yearly maintenance checks. |
| Appropriate and accurate weighing scales and means to measure height are available in all wards. | To allow accurate assessment of BMI                                                  |                                                                                                                                                                                                     |

* Repeat screening is recommended weekly in acute areas and at least monthly intervals thereafter in continuing care (CRAG 2000 p.46). It may be necessary to weigh patients in these areas more frequently e.g. those who fall into a higher risk category.
### SECTION 4: Criteria for nutritional referrals

<table>
<thead>
<tr>
<th>Statement</th>
<th>Reason for Statement</th>
<th>How to demonstrate statement is being achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where initial screening identifies nutritional problems further assessment takes place to determine the individual care plan.</td>
<td>To allow monitoring of patients at risk of malnutrition.</td>
<td>There is a record of nutritional risk score and of referral for further assessment.</td>
</tr>
<tr>
<td>Clear policies are in place for when nurses should refer patients to dietitians.</td>
<td>Dietetic referrals vary widely in their urgency and appropriateness.</td>
<td>Intake is monitored using food/ fluid intake records in patients identified as moderate - high risk.</td>
</tr>
<tr>
<td>Appropriate referrals are made for patients identified as being in need of specialist nutritional support.</td>
<td>To ensure patients with identified needs are referred for specialist advice.</td>
<td>Criteria are in place for the referral of patients to a dietitian.</td>
</tr>
<tr>
<td></td>
<td>To ensure referrals are carried out at an appropriate time and in a consistent manner.</td>
<td>Referral criteria and level of urgency are specified.</td>
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<tr>
<td></td>
<td></td>
<td>An appropriate screening tool is utilised (see example fig.1 p.4); these specify which patients are to be referred and to whom.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Referral procedures are in place.</td>
</tr>
</tbody>
</table>

SECTION 5: Education and training

<table>
<thead>
<tr>
<th>Statement</th>
<th>Reason for Statement</th>
<th>How to demonstrate statement is being achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>All nursing and support staff involved in the clinical care of patients</td>
<td>To increase awareness of the importance of nutrition to the health and well being of patients.</td>
<td>Programmes are relevant to the clinical area and to the level at which individuals are practising.</td>
</tr>
<tr>
<td>are provided with education and training opportunities covering the</td>
<td>To provide nursing staff with the knowledge to make appropriate assessments/ referrals.</td>
<td>Orientation of new staff includes information on catering system / procedure for food provision.</td>
</tr>
<tr>
<td>importance of general nutrition, nutrition screening and techniques of</td>
<td>To help staff identify individual patients nutritional needs.</td>
<td>An appropriate resource is adopted e.g. PACE pack or an equivalent to provide training to staff.</td>
</tr>
<tr>
<td>nutritional support.</td>
<td>To highlight ways of improving patients nutritional intake.</td>
<td>A multi-disciplinary approach to training sessions is promoted involving pharmacists, dietitians, catering</td>
</tr>
<tr>
<td></td>
<td>To highlight ways of improving patients nutritional intake.</td>
<td>staff, doctors and other therapists.</td>
</tr>
<tr>
<td></td>
<td>‘Malnutrition remains a largely unrecognised problem in hospital and highlights the need for education on</td>
<td>There is a record that training sessions take place.</td>
</tr>
<tr>
<td></td>
<td>clinical nutrition.’ (McWhirter &amp; Pennington 1996).</td>
<td>Dates of sessions are clearly identified and staff are aware of these.</td>
</tr>
</tbody>
</table>

Key challenges:

i. Ensuring adequate resources to provide staff with education and training.

ii. Developing strategies to incorporate nutrition into existing programmes e.g. induction days.

iii. Identifying ways to deliver education and training that recognise local structure
### Glossary of terms

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
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<tbody>
<tr>
<td>Body Mass Index (BMI)</td>
<td>Weight (in kilograms) divided by height (in metres). Used as a measure of nutritional status</td>
</tr>
<tr>
<td>Dysphagia</td>
<td>Inability to or difficulty with swallowing</td>
</tr>
<tr>
<td>Health record</td>
<td>Patient documentation (Medical/Nursing notes)</td>
</tr>
<tr>
<td>Malabsorption</td>
<td>Body's inability to absorb nutrients</td>
</tr>
<tr>
<td>Nil by mouth (NBM)</td>
<td>Instruction that patient must not eat / drink anything orally</td>
</tr>
<tr>
<td>Nursing assessment</td>
<td>Initial review of patient on admission</td>
</tr>
<tr>
<td>Nursing care plan</td>
<td>Individual plan relating to patient care, setting aims and objectives of treatment</td>
</tr>
<tr>
<td>Nutrition assessment</td>
<td>More detailed review of the patient to establish nutritional status more accurately</td>
</tr>
<tr>
<td>Nutrition screening</td>
<td>Simple and rapid process of identifying characteristics known to be associated with malnutrition</td>
</tr>
<tr>
<td>Nutrition screening tool</td>
<td>Aid to assess patient's nutritional status</td>
</tr>
<tr>
<td>Referral</td>
<td>Recommendation for further assessment to another member of health care team</td>
</tr>
<tr>
<td>Risk score</td>
<td>Score indicating level of need with a view to referral</td>
</tr>
<tr>
<td>Swallowing impairment</td>
<td>Difficulty swallowing due to medical condition, e.g. stroke</td>
</tr>
<tr>
<td>Undernutrition</td>
<td>Nutrient requirements not being met</td>
</tr>
</tbody>
</table>
References:


Recommended reading:


Recommended Resources:

Fresenius Kabi, Body Mass Index Chart, available from www.fresenius-kabi.com
Partnerships in Active Continuous Education (2001) Fundamental Nutritional Care of the Hospitalised Patient (Trained Staff), PACE, Queen Margaret University College, Edinburgh.
Partnerships in Active Continuous Education (2001) Nutrition an Issue for Quality Caring (Trained Staff), PACE, Queen Margaret University College, Edinburgh.

Screening tools:

It is recognised that many good examples of nutritional screening tools exist. The following are some examples of screening tools in use in specific clinical areas. All contain the criteria highlighted on p.4 and are available for sharing across Scotland.

Burton score, Shetland Health Board.
Birmingham Heartlands Hospital Nutritional Screening Tool, available from Nutrition and Dietetic Department, Birmingham Heartlands Hospital, www.heartsol.wmids.nhs.uk
Malnutrition Universal Screening Tool, Malnutrition Advisory Group (MAG), available from BAPEN, www.bapen.org.uk
Nutrition Assessment Form, Falkirk & District Royal Infirmary, Dietetic Department