

NUTRITION AND HYDRATION POLICY (Excluding Neonates)

	POLICY
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Target Audience	All clinical trust staff who treat and care for adults, Infants, children and young people Medirest staff involved in the delivery/service of patient meals
Review Date	August 2022
Sponsor (Position)	Chief Nurse, Medical Director
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Lead Division/ Directorate	Corporate
Lead Specialty/ Service/ Department	Medicine – Nutrition Support Team Paediatrics
Position of Person able to provide Further Guidance/Information	Consultant Gastroenterologist (Head of Nutrition Service) Nutrition Nurse Specialist Paediatric Practice Development Matron
Associated Documents/ Information	Date Associated Documents/ Information was reviewed
1. Nutritional Needs Care Plan (available to order via Forms Management, ref: FKIN030348)	Jan 2019
2. Fluid balance chart (available to order via Forms Management, ref: FKIN030204)	Dec 2017
3. Nutritional intake chart (available to order via Forms Management, ref: FKIN030276)	May 2016
4. Adult hydration risk assessment tool (on intranet)	May 2016
5. Hydration chart (on intranet)	May 2016)
6. Patient Special Diet Form (available to order via Forms Management, ref FKIN030444)	October 2018
7. Paediatric Yorkhill Malnutrition score (PYMS) (on intranet)	March 2017
8. Paediatric feed chart (On paediatric intranet)	23-01-2018
9. Paediatric fluid balance chart (on paediatric intranet)	October 2021
10. Maintain fluids – parent plan (On paediatric intranet)	23-01-2018
11. Push fluids – parent plan (On paediatric intranet)	23-01-2018
12. Paediatric nasogastric tube feeding integrated care pathway (On PPG intranet)	23-01-2019
13. Paediatric core care plan 6: Child or young person is dehydrated or at risk of dehydration (On intranet)	January 2018

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1.0 INTRODUCTION

Malnutrition and Dehydration

Malnutrition and dehydration is a common problem worldwide. At any point in time more than 3 million people in the UK are either malnourished or at risk of malnutrition (Patients Association 2011) and/or dehydrated or at risk of dehydration. (British Nutrition Foundation 2014). Providing patients with high quality nutrition and hydration is an integral part of their care. Provision of and

access to appropriate food and fluids to meet their needs is essential to promote individual health outcomes.

There has been increasing concern over the incidence of malnutrition and dehydration (NHS England 2015) in particular under nutrition and dehydration that exists in the hospital population and a growing awareness of the need to improve the overall nutrition and hydration care experience for the patient to improve clinical outcomes. There are many reasons for this:

- Food and fluid intake may be reduced through the effects of illness or disability
- Metabolic requirements may be increased due to the effects of illness
- Food and fluid may be unpalatable as a result of the disease/illness
- Poor nutritional intake prior to admission
- Poor fluid intake prior to admission
- Pain, depression, fear and or apathy, lead to decreased nutritional and fluid intake
- Multiple investigations, ward rounds and time away from the ward lead to meals and drinks being missed
- Inadequate supervision in supporting patients with eating and drinking at mealtimes and throughout the 24 hours period.

The under nutrition of children and young people is usually associated with poverty and poor food choices. Dehydration is also common although the overall numbers are less clear (NHS England: 2015). All children and young people admitted to hospital should:

- Have options available to allow them to eat a well-balanced diet of healthy food as outlined by national guidance.
- Have available sufficient food of good quality to meet their nutritional requirements.
- Sufficient fluid to ensure adequate hydration.

The focus of nutritional provision from hospital food should be on achievement of adequate energy intake to meet the estimated average requirement (EAR). The Association of UK Dietitians (2017).

Hospitals have a responsibility for ensuring that appropriate systems and processes are in place to both identify and manage patients who fall into these categories as well as ensuring that all patients have access to nutrition and hydration appropriate to their needs.

The delivery of excellent nutritional care in in-patients is a highly complex process which relies on a multi-disciplinary approach ensuring clinical and catering staff work together to meet the hydration and nutritional needs of patients.

The amount of fluid an adult or child needs to drink to avoid dehydration varies depending on a range of factors e.g. size, temperature and how active they are. The Department of Health recommends that adults should drink approximately 1.5 - 2 litres of fluid each day. For recommendations for infant and young people's fluid requirements see Tables 1 and 2 in sections 7.4.1 and 7.8

The Patient Nutrition and Hydration expert reference group states that the recommended standards meet the requirements of patients who are at risk of malnutrition.

Obesity

Obesity is a major clinical and public health issue. For patients in hospital this can adversely affect clinical outcomes. Identifying individuals who fall into this category and providing them with help and support at an appropriate time in their clinical care is an important role of the healthcare professional. The Patient Nutrition and Hydration expert reference group states that the recommend standards meet the requirements of patients seeking to reduce calorie intake to manage obesity or related disorders.

There has been an increasing focus on the issues of childhood obesity in recent years. There are many health campaigns and resources available to support children, young people and their families. See section 7.2.1.

2.0 POLICY STATEMENT

The purpose and scope of this policy is to provide guidance to all healthcare professional who care for patients or have a responsibility for ensuring appropriate systems and processes are in place to identify and manage patients with existing needs and those who are at risk of developing nutritional or hydration problems and to ensure that all patients have access to food and hydration appropriate to their needs (Care Quality Commission)

The aim of this policy is to ensure that:

- Patients receive excellent nutritional care and appropriate assistance
- The nutritional needs of patients are accurately assessed
- Ward based teams are supported in the delivery of food at mealtimes
- Mealtimes are viewed as a fundamental part of the patients treatment and that due regard and significance is given at these times
- Mealtimes are a key social activity for patients
- Standards of nutrition and hydration are proactively monitored and audited
- A framework exists to ensure appropriate and accurate documentation, enabling early identification of nutrition and hydration related issues that may include safeguarding concerns.
- There is a standardised approach to documentation of fluid/food intake.
- Where necessary staff can refer to other policies/ guidelines when specific nutritional needs are required (eg tube feeding and anorexia nervosa)

3.0 DEFINITIONS/ ABBREVIATIONS

AHP	Allied health professional
BAPEN	British association of parenteral and enteral nutrition
BMI	Body Mass Index
CQC	Care Quality Commission
CYP	Children and young people
EAR	Estimated Average Requirement
EN	Enteral nutrition
HCSW	Health care support workers

ICR	Inter Consultant Referral
IDDSI	International dysphagia diet standardisation initiative
IV	Intravenous
Malnutrition	A state of nutrition in which a deficiency, excess or imbalance of energy, protein and other nutrients causing measurable adverse effects on tissue, function and clinical outcome
MARSIPAN	Management of really sick patients with anorexia nervosa
MUST	Malnutrition Universal Screening Tool
NG	nasogastric
NJ	nasojejunal
ONS	Oral nutritional supplements
PEG	Percutaneous endoscopic gastrostomy
PEG-J	Percutaneous endoscopic gastrojejunostomy
PLACE	Patient-led assessments of the care environment
PN	Parenteral nutrition
PYMS	Paediatric Yorkhill Malnutrition Score
RIG	Radiologically inserted gastrostomy
RIG-J	Radiologically inserted gastrojejunostomy
RN	Registered nurse
S/C	Subcutaneous
SLT	Speech and language therapy
Stadiometer	Device for measuring height that typically consists of a vertical ruler with a sliding horizontal rod or paddle which is adjusted to rest on the top of the head.
Staff	All employees of the Trust including those managed by a third party on behalf of the Trust
Trust	Sherwood Forest Hospitals NHS Foundation Trust

4.0 ROLES AND RESPONSIBILITIES

Key responsibilities and duties of staff

Delivering excellent nutritional care to patients that are being cared for is a complex process and relies on good co-ordination. Standards of care need to be set, acted upon, audited and monitored and all staff within the Organisation have some responsibility to ensure that this happens.

Nutritional support therefore needs to be delivered via catering, ward nurses and the patient's medical team, supported by specialist advice and an authoritative, specialist-derived management structure which fosters excellence and responsiveness to external drivers.

Responsibly for ensuring the application of this policy lies with the Clinical Chair, Head of Nursing, Divisional Manager and Matron of each division

Summary of local key responsibilities relating to the organisation of the trusts nutritional services:

Nutrition and Hydration Steering Group

- The Nutrition and Hydration Steering Group is accountable to the Trust Board via the Patient Safety and Quality Group and will send activity reports to Nursing, Midwifery and AHP Group via the Harms Free Operational Group.

Medical Staff

- Clinical chairs are responsible for ensuring the dissemination and implementation of this policy within Divisions and for demonstrating compliance with this policy staff competency through audit.

Matrons/ Sister/Charge Nurses

- Matrons/ Sister/Charge Nurses are responsible for ensuring the dissemination and implementation of this policy within their clinical ward areas and for demonstrating compliance of staff competency through audit.

Multidisciplinary team

- All those needed in the management of the patient. All members of the multi-disciplinary team (RNs, AHPs, HCSW, Pharmacists, Hosts/Hostesses, Catering, Domestic staff and mealtime volunteers) will be aware of this policy and all care will be documented in the patient's healthcare records.

Patients, parents and carers

- Patients, parents and carers will be involved in shared decision-making about the management of nutrition and hydration. Patients, parents and carers should be encouraged to take a positive approach to improving nutrition and hydration and have a responsibility to respond to the advice given to them.

Soft Facilities Management Provider

The soft facilities management provider are responsible for ensuring:

- Meals provided are nutritionally balanced, imaginative and well presented
- Food and drink is varied to meet the needs of all patient groups.
- Adherence to current legislation, recommendations and core principles as detailed in Nutritional Guidelines for Hospital Catering.
- Any breast feeding mothers must have access to appropriate diet and fluid throughout the admission (including during admission of siblings)

5.0 APPROVAL

Following appropriate consultation this policy (v3.0) has been approved by the trust's Nutrition and Hydration Group

6.0 DOCUMENT REQUIREMENTS – ADULTS

6.1 Consent

- Where a patient's capacity is in doubt the mental capacity 2 stage assessment and best interest checklist should be completed and an individualised plan of care implemented.

6.2 Nutrition Screening

- **Nutritional screening** is the first step in identifying patients who may be at nutritional risk or potentially at risk and benefit from appropriate nutritional intervention. It is a rapid, simple and general procedure used by a registered health care professional at first contact with the patient (excluding maternity patients) so that clear guidelines for action can be implemented. The 'Malnutrition Universal Screening Tool' ('MUST') is used across the Trust for adults. This initial assessment must be completed within 24 hours of admission.
- Documentation of patients' nutritional, dietary and fluid intake requirements and preferences will form part of the initial assessment of all patients using the nursing assessment document (eating and drinking): where appropriate this will involve seeking information from patients' relatives and/or carers.
- The Nutritional Screening should be re-evaluated by a registered health care professional in the following circumstances:
 - Upon internal transfer within 24 hours
 - Following a significant change in the patient's overall condition (improvement or deterioration)
 - Every week
 - The 'Malnutrition Universal Screening Tool' (MUST) will be utilised to identify the levels of the patient's nutritional risk. Patients are categorised as low, medium or high. The management guidelines associated with the tool are used to develop a nutritional care plan dependent upon the risk.
 - For patients assessed as requiring a referral and treatment plan from the dietitians, refer to the MUST and Management Guidelines ([Appendix A](#)) and the Adult inpatient dietetic referral guidance ([Appendix D](#)).
- Patients at risk of refeeding syndrome will be taken into account prior to commencing nutritional supplements.

6.3 Hydration Screening

Hydration of the patient is as important as ensuring adequate food intake and the Trust is committed to ensuring that where appropriate patients are encouraged to take a range of fluids through the day and intake is documented if required.

- On admission to hospital the patient's fluid intake is assessed using the trusts [adult hydration risk assessment tool](#), referring to the risk assessment actions.

- Adult fluid balance charts are available to order through the trusts forms management system FKIN030204

6.4 Nutrition Support, supplements, artificial nutrition and hydration

Most patients coming into hospital are able to drink normally and manage a normal diet and fluids during their hospital stay. Some patients however need additional nutrition and hydration support to help meet their requirements.

- A nutritional care plan will be implemented, actioned, updated and evaluated for patients identified as medium risk (care plan A) or high risk (care plan B) (available to order through the trusts forms management system FKIN030348)
- The Red Tray ([Appendix B](#)) and Red Lid Jug system ([Appendix C](#)) will be implemented for patients identified as requiring assistance to eat and drink.
- Patients unable to meet their nutrition and/or hydration needs by oral routes may require additional nutrition and/or fluids.

6.4.1 Food fortification/food enrichment /artificial nutrition

- Use of snacks and /or oral nutritional supplements (ONS)
- Enteral tube feeds (refer to [PEG/RIG policy](#) and [NG/NJ Policy](#))
- Parenteral nutrition ([Parenteral Nutrition \(PN\) Administration Policy for Adult Patients](#))

None is exclusive and more than one approach may be needed.

Patients' risk of refeeding syndrome will be taken into account prior to commencing nutritional supplements. Refer to [Re-feeding syndrome – guidelines for the prevention and management in adult patients](#).

Patients identified as having a swallowing problem must be referred to speech and language therapy for assessment in order for the correct diet and/or fluids to be prescribed to ensure the patients nutrition and hydration requirements are met. Wards can refer via JONAH, critical care and EAU can refer on ext: 3320/3016)

6.4.2 Supplementary/Additional fluids

- Subcutaneous fluids (hypodermoclysis)
- Intravenous fluids
- Enteral fluids

Refer to:

- [Adult Hydration Risk Assessment Tool / Hydration Chart](#)
- [Subcutaneous infusions \(hypodermoclysis\)](#) (pharmacy information)
- [Intravenous Fluid Therapy Management for Adult Patients in Hospital Policy](#)

Wherever possible the aim is to re-establish the patient back onto oral diet and fluids

6.4.3 Anorexia Nervosa

- Adult patients admitted to the Trust with Anorexia Nervosa are assessed appropriately using the **MARSIPAN** checklist which is included in the:
 - [Anorexia Nervosa \(AN\) – management guideline for adult patients on medical wards at SFHFT](#)
- In addition, there is guidance for younger patients via the paediatric intranet at:
 - [Junior MARSIPAN Checklist](#)
 - [The Junior MARSIPAN Table for Assessment of Physical and Psychological status \(supporting information\)](#)

6.5 Making Mealtimes Matter / Protected Mealtimes

The therapeutic role of food within the healing process cannot be underestimated and food and the service of food are an essential part of a patient's treatment.

Making mealtimes matter/protected mealtimes is a period of time when all non-essential activities on the ward will stop, thus preventing unnecessary interruptions at mealtimes. Friends and relatives will be welcomed to the wards to give assistance or encouragement at mealtimes. Communication will be displayed informing staff and visitors of the mealtimes.

The privacy and dignity of patients at mealtimes should also be considered. There are patients who may feel uncomfortable eating and drinking in the presence of others (e.g. they have functional disabilities) and where this is the case this should be reflected in the patients care plan so that all staff involved at mealtimes are aware of the support required for that individual.

6.5.1 Catering

To help ensure a consistent approach for mealtimes:

- Patients should be offered a choice of all suitable food items from the menu no more than 2 meals in advance.
- The choice of menu available should include a healthy eating option, high energy food, soft diet, and sandwiches for both lunch and evening meal.
- A special menu will be available for patients with special requirements, e.g. patients requiring specific textured food. Speech and language therapists advise on the safest viscosity of food and/or drink for a patient with dysphagia using the International Dysphagia Diet Standardisation initiative (IDDSI) [IDDSI diet sheet training presentation](#) This will be recorded on the patient special diet sheet and above the patient's bedhead as well as medical and nursing documentation. [over bed swallowing assessment sign](#)
The patient special diet sheet is available to order through the trusts forms management system FKIN 030444. A representational copy can be seen at [Appendix E](#)

- Cultural, religious and ethnic meals appropriate for the local population will be available and the menu available to read in other languages.
- All food preparation shall comply with food safety legislation.

There will be an out-of-hour's availability of both hot food and snacks across all 3 sites.

6.5.2 Meal Environment/Food Service

- To help ensure a consistent approach at mealtimes: All staff will be informed of individual patient's nutritional needs including food allergies at the beginning of their shift.
- All clinical staff should finish off tasks and where required be available to help with the mealtime service
- Identify patients who require a red tray/red lid jug
- Know which patients need assistance with feeding and allocate someone to assist
- If patients require help only serve meals when assistance is ready
- Ensure patients have the opportunity to visit the toilet prior to the mealtime service
- Sit patients up in bed, in chair or take to dining room, if appropriate to do so, ensuring patients privacy and dignity.
- Offer patients the opportunity to wash their hands or use hand wipes and help them to use
- Clear patients' tables and wipe clean
- Ensure patients have serviette, appropriate drink, correct cutlery, condiments, eating aids if required
- Open packets, cut up food and provide assistance if required
- Check patients are happy with their choice of meal and have everything they need
- Complete food, hydration and fluid balance charts
- Ask the patients "how was your meal?" and act on patients response

6.5.3 Beverages

- Water will be provided for hospital inpatients at the bedside in individual water jugs and also from trolleys during ward drinks rounds. Patients requiring thickened fluids must be supervised unless assessed as competent to thicken own fluids by speech and language therapist or the nurse responsible for their care.
- Individual water jugs will be refilled throughout the day to ensure water is clean and cool.
- A minimum of 7 beverages (both hot and cold) from the trolley will be offered throughout each day.
- Appropriate drinking vessels will be offered and supplied to all patients.
- Guidance to enable staff to assess the volume of fluid patients are drinking will be provided and displayed in the clinical areas.

7.0 DOCUMENT REQUIREMENTS – INFANTS, CHILDREN AND YOUNG PEOPLE

7.1 Consent

On admission to the ward/attendance to children's outpatients consent should be sought and documented from the person accompanying the child who has appropriate responsibility for the infant, child or young person to be weighed and have their height/length measured. Weight and height or length should be completed by two members of staff, one of whom must be a registered nurse. This will support the early identification of possible pre-existing feeding issues which may impact on patient condition and recovery. Measurement can be delayed if the infant, child or young person is critically unwell.

7.2 Nutrition Screening

As part of the nursing admission process, it is vital that health care staff establish how the infant, child or young person's hydration and nutritional needs are met normally. This is to establish a baseline, to assess and document the infant, child or young persons individualised needs and skills.

Nutrition Screening ensures the safe delivery of food and fluid which is tailored to the individual needs of the patient.

For children who are aged 1 year and above on ward 25, the Paediatric Yorkhill Malnutrition Score ([PYMS](#)) must be completed within 24 hours of admission and appropriate actions undertaken as identified within the tool.

Nursing and/or medical staff must liaise with the dietetic team, at the earliest opportunity when dietetic input is required. This enables specific needs/requirements to be addressed in a timely manner. **(All referrals to the Infant, Children and Young Persons dietitian must be completed on ICE).**

Health care staff on ward 25 must ensure that all fluid and food intake is accurately documented and monitored. Every infant, child & young person must have a paediatric feed chart regardless of underlying condition whether or not fluid/food intake is a concern.

This will allow the early identification of any problems and will also support healthcare staff in identifying that adequate fluid and food has been offered and whether adequate intake has been achieved.

All food and drink provision should be in alignment with the trust food and drink strategy where appropriate, which is available via the trust intranet. [Food and Drink Strategy](#)

Assessment of an infant, child or young person's normal nutritional routine at the point of admission, or where reasonably practical will help health care staff identify opportunities for health promotion/healthy eating advice.

7.2.1 Useful resources:

- Change for Life Campaign
- Change for Life resources
- The Eatwell Guide
- The Eatwell Guide Booklet

7.3 Hydration Screening

On admission to ward 25 all infants children and young people's fluid intake prior to admission will be assessed and documented. Fluid requirements will be assessed as per the information in tables 1 and 2. (See 7.4.1 and 7.8)

Concerns regarding fluid intake will be discussed with the medical team and the appropriate care plan implemented. (See 7.9)

On ward 25 there will be a supply of sugar free drinks and water (accessible on the main ward corridor A side) cow's milk and "from concentrate" fruit drinks located in the ward kitchen.

Ward 25 will provide sugar-containing soft drinks for the purpose of management of hypoglycaemia and for use in patients requiring a glucose tolerance test. These will be supplied via the inpatients kitchen and additional supplies can be obtained via the diet chef.

7.3.1 Documentation of fluid requirements

For infants on ward 25 that are not dehydrated, the minimum expected or target fluid requirements must be calculated and written on the paediatric feed chart. Where the plan is to 'push fluids' in order to ensure adequate intake, adequate information needs to be provided regarding volumes and types of fluids/feed required, and this must be described using the Maintain Fluids Parent Plan. This ensures that parents/carers have a clear, well-communicated plan with regard to maintaining fluid/food intake and promotes parent/carer involvement in care.

The nurse responsible for the infants care must regularly review the parent plan and to ensure that food/fluid volumes are being achieved.

The information contained within the parent plan should then be documented on the paediatric feed chart to ensure an accurate and current fluid balance is maintained.

It is important that staff identify individual dietary requirements and a calculated daily minimum fluid total on paediatric feed charts. This is of particular importance when caring for patients who are at risk of dehydration or dehydrated, as this will support in accurately monitoring and managing fluid intake.

7.4 The Infant

7.4.1 Normal requirements for hydration

It is essential that health care staff have an understanding of the maintenance hydration requirements of infants to ensure optimal hydration is achieved. Estimated fluid requirements for infants are:

For Infants under 10 kg (approximately 1 year of age)

Table 1

Age	Approx. weight (Kg)	Fluid (mls/kg)
Premature	1-2	150 - 200
0-6 months	3-8	150
7-12 months	6-10	120

(NB: Fluid intake does not necessarily equate to intake of feed. Some water will be obtained from solids from around 6 months of age)

Evidence base: Great Ormond Street Hospital (2015) 6th Ed. Nutritional requirements for children in health and disease GOSH-NHS Foundation Trust)

7.5 The Breastfeeding Mother:

Sherwood Forest Hospitals NHS Foundation Trust will advocate breast feeding and support families to achieve this.

Breast feeding is a Public health England priority, and as a UNICEF Baby Friendly accredited trust, Sherwood Forest Hospitals NHS Foundation Trust is dedicated to supporting breastfeeding and breast feeding Mothers.

All Staff will support and encourage breast feeding mothers to breastfeed.

If mothers express difficulties around breastfeeding, the Specialist Midwife for infant feeding advisor and/or the Infant Feeding Team should be contacted for advice and support. Any information support strategies or feeding plans suggested should be clearly documented within the infant's records, to ensure that all staff can support in implementation of advice, and evaluate accordingly.

Breast feeding mothers will be supported in continuing to breast feed wherever possible. This will include ensuring that all breast feeding mothers are offered food and fluid throughout their child's period of hospitalisation. Food and fluid will be offered in alignment with current ward meal and snack times. Food and fluid should also be offered to breast feeding mothers who are currently breastfeeding the siblings of hospitalised children, to promote continuity. Dietary requirements of breast feeding mothers should be communicated to the ward hostess/host.

If there is a provisional diagnosis of a cow's milk protein allergy, Mothers should be supported in continuation of breast feeding, with advice provided on calcium supplementation for Mother, and milk free diet where required.

7.6 The breast-fed infant:

Where an infant requires supplementation of feeds, expressed breast milk (EBM) should be the first choice, however where this is not yet available, rationale should be fully discussed with the family before the use of formula supplementation and this should be clearly documented. The options for infant feed should be explained and parental choice of feed encouraged where appropriate. If required, support from the dietitian should be sought (E.G, support in formula selection, advice on breast milk fortification).

Where an infant is readmitted to ward 25 following a very recent discharge from maternity services, the [Reluctant to feed – management of healthy newborn babies at term guideline](#) should be consulted to support in care delivery.

For guidance on the storage of expressed breast milk, please refer to the following guideline:

[“Breast milk expressing and handling guideline”](#)

Important Information:

- **All expressed breast milk must be appropriately labelled with the child's name and date of birth and D number. It should also be dated and timed.**
- ***Verify it is the correct milk for the correct infant before administration with a two person check. The first checker must be a registered practitioner; the second checker can be another member of staff or the mother/carer. The name and DOB on the EBM label should be checked against the infants identity bracelet**
- **The milk should be signed for on the paediatric feed chart by the member(s) of staff checking the EBM and where appropriate documented as checked with mother/carer on the feed chart.**

7.7 The Formula Fed Infant:

When infants are admitted as an emergency the ward has a limited supply of ready to feed formula available. Ready to feed formula is supplied to reduce the risk of bacterial growth associated with making up powdered infant formula. For patients who are resident for more than 24 hours parents/carers should be encouraged where possible to access their own usual formula.

For infants aged under 1 year on ward 25 there will be provision of equipment to ensure adequate sterilisation of feeding equipment.

Staff will support parents/carers where required in the preparation of feeds in the baby food preparation room.

Powdered milk feeds will be supplied as follows:

7.7.1 Prescription only powdered formula – not patient specific:

Ward 25 hold a supply of powdered prescription formula. This is to ensure timely access to prescription only formula if required for hospitalised patients. The preference would be that as soon as is practical, patients own stock will be ordered from pharmacy following medical prescription. In the interim, ward stock tins of powdered prescription formula must be used for one patient only, must be labelled accordingly and must be stored in a locked cupboard in the ward feed preparation area or in the patient's room. Opened tins must be labelled with the patient name, DOB and the date and time of opening. Any opened, unlabelled tins of formula must be disposed of immediately.

7.7.2 Prescription only formula – patient specific:

As indicated prescription only patient specific formula must **only** be given to the patient for whom the formula is prescribed. Opened tins must be labelled with the date they have been opened and must be discarded as per manufacturer's instructions. They must be used as per dietitian plan/medical prescription and stored in a locked cupboard in the ward feed preparation area or in the patient's room.

Prescription only liquid feeds can be stored in the clean utility area.

The use of soya formula in infants less than 6 months of age should be avoided (Committee on Toxicity, 2003)

All prescription milks and formulas should be administered in accordance with the patient's drug prescription record and in accordance with standards outlined in the medicines policy (SFH2019). This should incorporate two – nurse checking and positive identification of the patient.

7.8 Fluid requirements for older children

(Table 2) For children over 10 kg:

11 – 20 kg	100ml/kg for the first 10 kg + 50ml/kg for the next 10kg
20kg and above	100ml/kg for the first 10 kg + 50ml/kg for the next 10kg + 20ml/kg thereafter up to 2500mls/day maximum (MALE), 2000mls/day (FEMALE)

(National Institute for Health and Care Excellence: (NG29 2015) Intravenous fluid therapy for children and young people in hospital.)

7.9 Inadequate hydration of Infants, Children and Young People:

In the event that an infant, child or young person is unable to maintain adequate fluid intake to maintain hydration, this should be escalated to the paediatric medical team to assess. The nurse responsible for the infant or young person should implement nursing care actions as identified in ***Paediatric Core Care Plan 006***

Diarolyte will be promoted as the fluid of choice for the unwell child who is not eating and not in receipt of milk for both maintenance and rehydration in the absence of sugar containing fluids

Push Extra Fluids - Parent Plan

This plan would be implemented where the infant, child or young person is dehydrated.

Maintain Fluids- Parent Plan

This plan would be implemented where an infant, child or young person is not dehydrated but is at risk of dehydration

For infants, children & young people where adequate hydration cannot be maintained orally, an appropriate and timely escalation to the paediatric medical team should occur, so an appropriate pathway of care can be implemented, this may require maintenance of hydration via the NG or IV route

8.0 DOCUMENT REQUIREMENTS (PAEDIATRIC NASOGASTRIC TUBE FEEDING)

Where nasogastric tube insertion is being considered for supplementation of feeding, especially when there is a likelihood that the infant, child or young person may require a nasogastric tube upon discharge, Nursing & Medical staff must liaise with the dietitian. For further information and guidance please refer to the associated resource [Paediatric Nasogastric Tube Feeding Integrated Care Pathway](#)

8.1 Normal requirements for Nutrition

For infants that are solely formula/breast fed, there is an expectation that their nutritional requirements will be met, if they achieve adequate volumes of milk. As infant patients are not routinely screened using an approved tool, it is essential that all food and fluid intake is accurately documented and reviewed for adequacy (See Table 1).

In addition to the meal provision for infants, children and young people parents/carers who have been resident with their child overnight can access breakfast on the ward. These parents/carers should be identified and communicated to the ward hostess.

8.2 Weaning

Weaning should be encouraged from 6 months of age (ESPGHAN 2017). However if parents/carers wish to wean earlier then they should be encouraged to wait until the infant has reached seventeen weeks of age. The nursing staff should support the weaning process and this should be done in consultation with the dietitian where appropriate. The weaning pathway should include initial introduction to pureed food progressing to foods of a lumpy texture (Coma 1994). If parents/carers choose to adopt a “Baby-led weaning” approach, they should be supported through the provision of appropriate food.

8.3 Nutrition in the older child

Good eating habits can be encouraged by the hospital menu and by encouraging healthy snacks, including good quality fresh fruit and drinks, including water. [The Eatwell Guide Booklet](#) shows the five food groups and the balance to aim for throughout the day. Although this does not apply to children under the age of two years as they have different nutritional needs, children between the ages of two and five years should gradually move towards eating the same foods as the rest of the family, in proportions as shown in The Eatwell Guide.

For hospitalised children and young people, the relative proportions of the food groups in The Eatwell Guide may not be appropriate (as they may require a greater reliance on energy dense foods and snacks – high in fat and/or sugar). The focus of nutritional provision from hospital food should be on achievement of an adequate energy intake. An average day's intake from breakfast, two main meals, two to three snacks and milk (or a suitable alternative), should meet the Estimated Average Requirement (EAR).

All staff are responsible for ensuring food and fluid are offered and encouraged at appropriate times and that all food and fluid intake is recorded.

If specific and individualised patient requirements cannot be met through hospital menu provision then ward 25 will contact the diet chef (Extension number: 3095) or the dietitian as appropriate (Extension number 3252).

It is the responsibility of the Nurse in charge of the shift to ensure timely communication with the ward hostess, regarding individualised dietary needs, using the appropriate documentation Patient Special Diet Form

8.4 Monitoring growth

Faltering growth can occur at any time during childhood although is most common during the first two to three years of life. Faltering growth can have many causes including medical and/or social factors. Guidance on the identification and management of faltering growth can be accessed via the link: <https://www.nice.org.uk/guidance/ng75>

The NICE Guideline on Faltering Growth suggests the following thresholds are used to define faltering growth:

- A fall across 1 or more weight centile spaces, if birthweight was below the 9th centile
- A fall across 2 or more weight centile spaces, if birthweight was between the 9th and 91st centiles
- A fall across 3 or more weight centile spaces, if birthweight was above the 91st centile
- When current weight is below the 2nd centile for age, whatever the birthweight.

Anthropometric measurements are used to identify infants, children & young people with faltering growth. Accurate serial measurements of weight, height or length and head circumference should be plotted on the appropriate growth chart:

<https://www.rcpch.ac.uk/resources/growth-charts>

- Neonatal close monitoring charts
- WHO UK 0-4 years old
- UK Standard for 2-18 years old

Any infant or young person whom is identified as having faltering growth should be referred to the dietitian

8.5 Standards for weighing and measuring infants

8.5.1 Measuring weight

- The appropriate weighing device must be selected: 0-2 years – baby scales.
- Infants must be weighed on the same scales on each occasion a weight is checked. Nursing staff should document the MEMD number of the scales used to ensure consistency
- The infant should be weighed naked (0–2 years) with appropriate explanations provided for parents/carers regarding why this is necessary. Appropriate arrangements must be made to ensure privacy and dignity. Any marks to the skin that are identified during this process should be clearly documented.
- The infant must be weighed in metric measurements.
- Two members of staff must weigh the infant (one of which must be a qualified nurse)
- Where there are concerns regarding a weight measurement, the parent/carer should be consulted regarding any history of changes in appetite and/or feeding patterns. A previous weight measurement should be obtained for comparative purposes.

If there are concerns regarding weight measurement, the concerns must be escalated to the medical team, to ensure weight is plotted on the appropriate growth chart. [Infant and Toddler Forum Growth Measurement Resources](#)

8.5.2 Measuring length

- The infant should be measured naked (0-2 years). Measuring infants with any clothing including a nappy can distort the hips and shorten the length. Any marks to the skin that are identified during this process, should be clearly documented.

Two people are required to obtain an accurate length measurement. One to support the child’s head against the headboard of the device and one to gently flatten the knees and flex the ankles of the infant to 90 degrees and bring the footboard up to the flat soles of the flexed feet. [Infant and Toddler Forum Growth Measurement Resources](#)

8.5.3 Rate of expected weight gain in infants

0-3 months	200 grams per week
4-6 months	150 grams per week
7-9 months	100 grams per week
10-12 months	50 – 75 grams per week

Evidence base: Shaw V (Ed) 2014 Clinical Paediatric dietetics 4th edition. Blackwell science. Oxford.

8.5.4 Weighing the Older Child

Children over two years should be weighed in light clothing without shoes. If this is not possible it must be recorded whether the child is weighed wearing a nappy and the type of clothing worn by the child. Toddlers who are unsettled or distracted can be held by a parent/carer and both weighed together. The parent's/carer's weight is then taken separately and subtracted from the total weight to calculate the child's approximate weight.

8.5.5 Measuring the Older Child

For children over two years or whenever the child can stand straight and unsupported, standing height is measured using a stadiometer. Shoes must be removed and the child's back and legs must be straight, the heels, buttocks, shoulder blades, and back of head touching the measuring board and the child should be looking straight ahead. The measurement should be taken on expiration.

8.6 Expected Growth

1 st year	25 cm per year
2 nd year	12 cm per year
3 rd year	6-10 cm per year until growth spurt at puberty.

Nutrition Support Reference Guide INDI (2015)

Further Information on Weighing and measuring children can be found here:

[Infant and Toddler Forum Growth Measurement Resources](#)

8.7 PYMS

The Paediatric Yorkhill Malnutrition Score [PYMS](#) must be completed on all children over 1 year of age within 24 hours of admission. The score will then be actioned appropriately:

Score	Action
0	Repeat PYMS Score in 1 week
1	Repeat PYMS Score in 3 days
2 or above	Request Dietitian Review and Repeat PYMS Score in 1 week

8.8 Help and Support

If there are on-going non-acute concerns other sources of help available are:

- Healthy Families Teams:
- Mansfield - 01623 420692
- Ashfield - 01623 557136
- Newark and Sherwood - 01636 594839
- Self-referral to CAMHs (12-18 year olds) 0115 854 2299 or via online form at www.nottinghamshirehealthcare.nhs.uk/camhs
- Overweight Children and Adults Self-referral to Change Point (over 5 years old) [Changepoint Referral Form](#)
- Eating Disorders- Beat Youthline 0808 801 0711

8.9 Sharing information on discharge with the relevant services

Dietetic referral for paediatric patients requiring outpatient support should be referred via letter, ICR or email to sfh-tr.dietetics@nhs.net

Any supplements or specialist feeds started in hospital should be communicated to the GP for ongoing prescription post discharge by the discharging clinician if required.

Any relevant information should be provided to the healthy families team to allow access to appropriate support post discharge.

Mansfield - 01623 420692

Ashfield - 01623 557136

Newark and Sherwood - 01636 594839

Any information that would be useful for community teams or the family should be included in the red book which should be updated if available prior to discharge.

If any safeguarding concerns have been identified or actioned during the hospital stay it is essential that the relevant social care team is informed of patient discharge.

9.0 MONITORING COMPLIANCE AND EFFECTIVENESS

Minimum Requirement to be Monitored	Responsible Individual	Process for Monitoring e.g. Audit	Frequency of Monitoring	Responsible Individual or Committee/ Group for Review of Results
(WHAT – element of compliance or effectiveness within the document will be monitored)	(WHO – is going to monitor this element)	(HOW – will this element be monitored (method used))	(WHEN – will this element be monitored (frequency/ how often))	(WHERE – Which individual/ committee or group will this be reported to, in what format (eg verbal, formal report etc) and by who)
PLACE AUDIT	Medirest/Compass Group/Trust	Prospective audit	yearly	Nutrition and Hydration Steering Group - report. Infection Prevention & Control (IPC) meeting – report. IPC link day – verbal report Estate and Facilities Governance meeting – report Patient Safety & Quality Group meeting – report.
Perfect Ward	Divisional matrons and individual ward/departments	Electronic audit	See results column	Nutrition and Hydration Steering Group – report (annual) Ward assurance – report, verbal by ward leaders (monthly) NM&AHP and divisions (monthly)
Incident reporting	Nutrition Nurse Specialist Ward Sister – Ward 25 Practice Development Matrons Relevant divisions	Datix reporting	See results column	Nutrition and Hydration Steering Group – report (every two months) Harms Free Operational Group (monthly)
Friends and Family Test	Patient experience team	Friends and Family Test	monthly	Nutrition and Hydration Steering Group – report.
Ward catering audit	Medirest/Compass group	Ward-based audit	monthly	Nutrition and Hydration Steering Group

10.0 TRAINING AND IMPLEMENTATION

The contents of this policy will be integrated into training programmes provided across the Trust. Training includes:

- Trust/local Induction training for all staff (monitored by Training and Development Department).
- Nutrition Link champion training
- Each ward/team there will be a nutrition and hydration champion, who has participated in more detailed training and network events. They will support local training and advice for their local immediate team and be responsible for local resources.
- Catering/hostess/hosts involved in the regeneration (cook/chill)of food at ward level will receive specific training on how to do this safely
- Competencies for enteral feeding tubes

11.0 IMPACT ASSESSMENTS

- This document has been subject to an Equality Impact Assessment, see completed form at [Appendix F](#)
- This document has been subject to an Environmental Impact Assessment, see completed form at [Appendix G](#)

12.0 EVIDENCE BASE (Relevant Legislation/ National Guidance) AND RELATED SFHFT DOCUMENTS

Addressing poor nutritional care of patients is highlighted as a priority in several key documents and the Trust is committed to ensuring that all the recommended standards and guidance are addressed. The following documents provide the framework within which the Trust is working to improve the nutritional care of its patients.

- NICE Guidance on Nutrition Support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition (2006)
- NICE Quality standard 24: Quality standard for nutrition support in adults (2012)
- Care Quality Commission (CQC): Outcome 5 Nutrition
- Essence of Care: Nutrition Benchmark (2010)
- 10 key characteristics of good nutritional care in hospitals. Council of Europe Resolution on Food and Nutritional Care in Hospitals (2007)
- NHS Kidney Care Hydration Matters (2012)
- PLACE (2018). Assessments relate to provision of safe and appropriate food and drink for patients and assistance when required at mealtimes within an environment conducive to eating and drinking
- Obesity – www.nhs.co.uk/conditions/obesity (2016)
- International Dysphagia Diet Standardisation Initiative (IDDSI)

Evidence Base:

- The Association of UK dietitians (2017) 2nd Ed: **The Nutrition and Hydration Digest: Improving outcomes for food and food beverage services**. BDA food services specialist group.
- National Health Service England (2015) **Guidance – Commissioning excellent nutrition and hydration**. NHSE.
- Great Ormond Street Hospital (2015) 6th Ed: **Nutritional requirements for children in health and disease**. GOSH NHSFT.
- National Health Service England, Unicef & the Baby Friendly Initiative (2015): **Off to the best start - Important information about feeding your baby**. NHSE.
- The European Society for Paediatric Gastroenterology & Nutrition committee on Nutrition (2017) **Complimentary feeding – A position paper**. Journal of Paediatric Gastroenterology & Nutrition. Vol 64 Issue 1.
- COMA (1994)
- Scientific advisory committee on Nutrition(2003) **Response to the COT working group on Phytoestrogens draft report on phytoestrogens & health**
- Shaw V (Ed) 4th edition (2014) **Clinical Paediatric dietetics**. Blackwell science. Oxford.
- Irish Nutrition & Dietetics institute (2015) **Nutrition Support reference Guide**
- National Institute for Health and Care Excellence (2015) **Intravenous fluid therapy for children and young people in hospital**. NICE.
- National Institute of Health and care excellence (2017) NICE guideline [NG75] **Faltering growth: recognition and management of faltering growth in children**. NICE
- Public Health England (2019) **The eat well guide – Helping you to eat a health, balanced diet**. Public Health England.

Related SFHFT Documents:

- ICCU Enteral Feeding Guideline
- IV Policy – Policy for the care of the Patient Undergoing Intravenous Therapy (Bolus, Continuous and Intermittent)
- Intravenous fluid therapy management in adult patients in hospital policy
- Anorexia Nervosa (NA) - management guideline for adult patients on medical wards at SFHFT (MARSIPAN)
- Parenteral Nutrition (PN) Administration Policy for Adult Patients
- NG and NJ Feeding Tubes Policy (including enteral feeding starter regimen)
- PEG; PEG-J; RIG; RIG-J Policy
- Refeeding syndrome – guidelines for the prevention and management in adult patients
- The Food and Drink Strategy
- Reluctant to feed – Management of healthy new born babies at term guidance.
- Medicines Policy
- Breastmilk expressing and handling guideline.
- Subcutaneous infusions (hypodermoclysis) (pharmacy information)

13.0 KEYWORDS

- dehydration MUST PYMS malnutrition universal screening tool paediatric yorkhill malnutrition score malnourish dehydrating food dietetic referral dietetics dietician adult protected meal times mealtimes oral adult support guideline screening artificial food beverages catering environment making mealtimes matter red tray lid jug flowchart MARSIPAN

14.0 APPENDICES

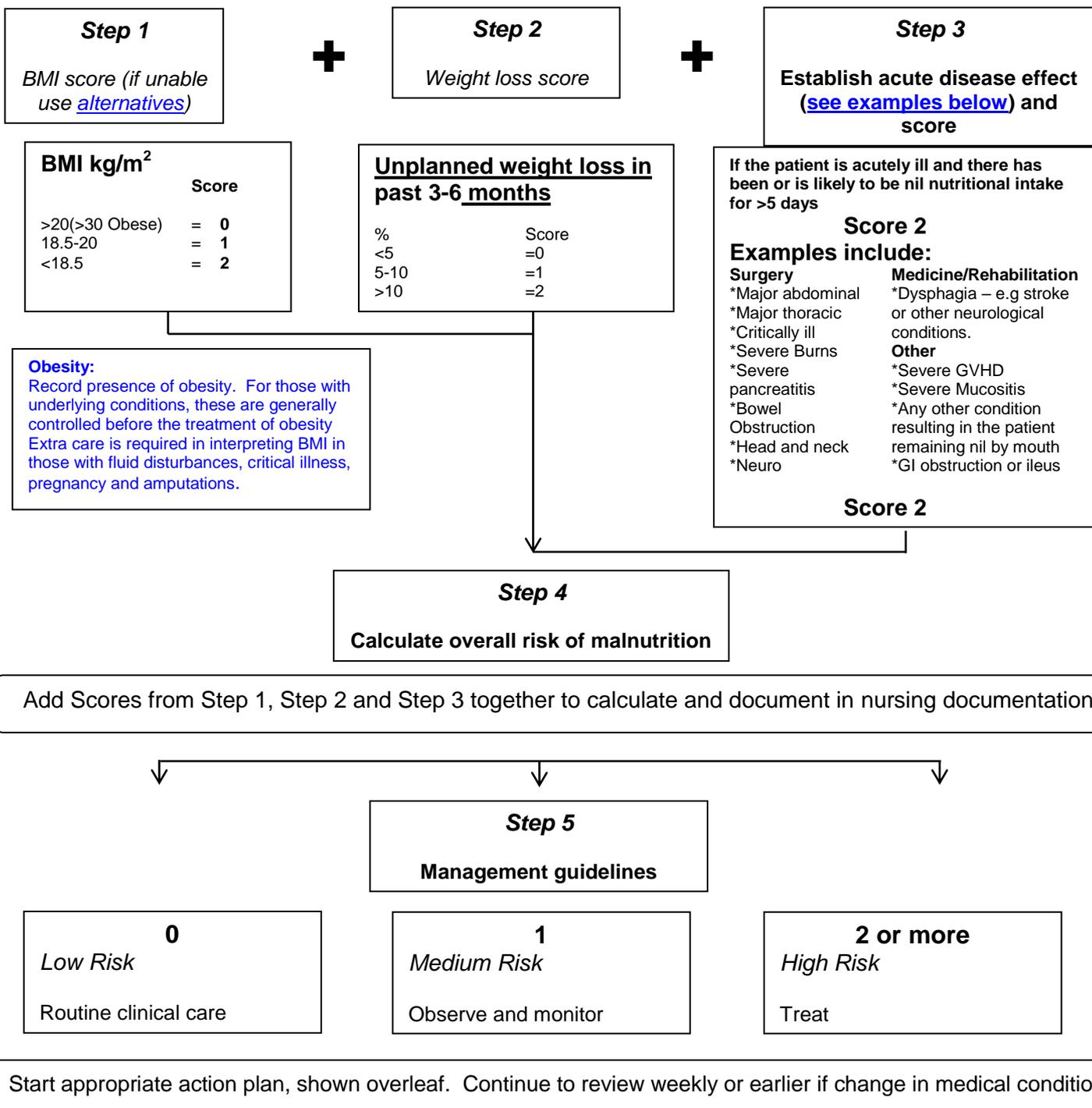
- [Appendix A](#) – MUST – Malnutrition Universal Screening Tool
 - Step 1 – BMI Score (& BMI)
 - Step 2 – Weight loss score
 - Alternative measurements and considerations
 - Factors influencing body weight
- [Appendix B](#) – Red tray flow chart
- [Appendix C](#) – Red lid jug flowchart
- [Appendix D](#) – Adult inpatient dietetic referral guidance
- [Appendix E](#) – Patient Special Diet Form (representational copy)
- [Appendix F](#) – Equality impact assessment form
- [Appendix G](#) – Environmental impact assessment

Appendix A – Malnutrition Universal Screening Tool (MUST)

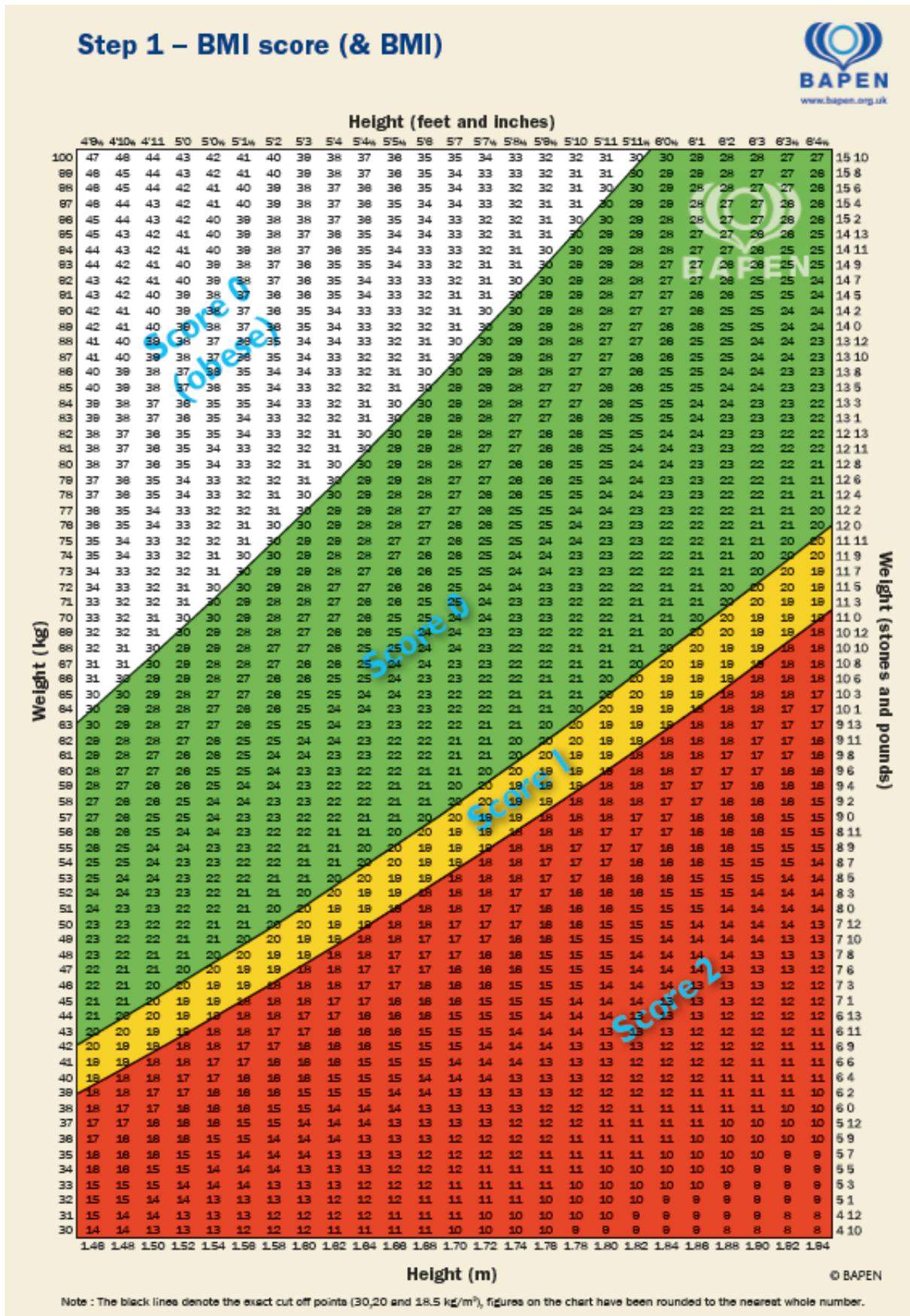


‘Malnutrition Universal Screening Tool’ (MUST)

Screen on admission and weekly thereafter



Step 1 – BMI score (& BMI)



Step 2 – Weight loss score (BAPEN 2008)

Step 2 – Weight loss score



Score 0 Wt loss < 5%	Score 1 Wt loss 5 - 10%	Score 2 Wt loss > 10%
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Weight loss in last
3 to 6 months

kg	Less than (kg)	Between (kg)	More than (kg)
30	1.6	1.6 - 3.3	3.3
31	1.6	1.6 - 3.4	3.4
32	1.7	1.7 - 3.6	3.6
33	1.7	1.7 - 3.7	3.7
34	1.8	1.8 - 3.8	3.8
35	1.8	1.8 - 3.9	3.9
36	1.9	1.9 - 4.0	4.0
37	1.9	1.9 - 4.1	4.1
38	2.0	2.0 - 4.2	4.2
39	2.1	2.1 - 4.3	4.3
40	2.1	2.1 - 4.4	4.4
41	2.2	2.2 - 4.6	4.6
42	2.2	2.2 - 4.7	4.7
43	2.3	2.3 - 4.8	4.8
44	2.3	2.3 - 4.9	4.9
45	2.4	2.4 - 5.0	5.0
46	2.4	2.4 - 5.1	5.1
47	2.5	2.5 - 5.2	5.2
48	2.5	2.5 - 5.3	5.3
49	2.6	2.6 - 5.4	5.4
50	2.6	2.6 - 5.6	5.6
51	2.7	2.7 - 5.7	5.7
52	2.7	2.7 - 5.8	5.8
53	2.8	2.8 - 5.9	5.9
54	2.8	2.8 - 6.0	6.0
55	2.9	2.9 - 6.1	6.1
56	2.9	2.9 - 6.2	6.2
57	3.0	3.0 - 6.3	6.3
58	3.1	3.1 - 6.4	6.4
59	3.1	3.1 - 6.6	6.6
60	3.2	3.2 - 6.7	6.7
61	3.2	3.2 - 6.8	6.8
62	3.3	3.3 - 6.9	6.9
63	3.3	3.3 - 7.0	7.0
64	3.4	3.4 - 7.1	7.1

Current weight

Score 0 Wt loss < 5%	Score 1 Wt loss 5 - 10%	Score 2 Wt loss > 10%
-----------------------------------	--------------------------------------	------------------------------------

Weight loss in last
3 to 6 months

kg	Less than (kg)	Between (kg)	More than (kg)
65	3.4	3.4 - 7.2	7.2
66	3.5	3.5 - 7.3	7.3
67	3.5	3.5 - 7.4	7.4
68	3.6	3.6 - 7.6	7.6
69	3.6	3.6 - 7.7	7.7
70	3.7	3.7 - 7.8	7.8
71	3.7	3.7 - 7.9	7.9
72	3.8	3.8 - 8.0	8.0
73	3.8	3.8 - 8.1	8.1
74	3.9	3.9 - 8.2	8.2
75	3.9	3.9 - 8.3	8.3
76	4.0	4.0 - 8.4	8.4
77	4.1	4.1 - 8.6	8.6
78	4.1	4.1 - 8.6	8.7
79	4.2	4.2 - 8.7	8.8
80	4.2	4.2 - 8.9	8.9
81	4.3	4.3 - 9.0	9.0
82	4.3	4.3 - 9.1	9.1
83	4.4	4.4 - 9.2	9.2
84	4.4	4.4 - 9.3	9.3
85	4.5	4.5 - 9.4	9.4
86	4.5	4.5 - 9.6	9.6
87	4.6	4.6 - 9.7	9.7
88	4.6	4.6 - 9.8	9.8
89	4.7	4.7 - 9.9	9.9
90	4.7	4.7 - 10.0	10.0
91	4.8	4.8 - 10.1	10.1
92	4.8	4.8 - 10.2	10.2
93	4.9	4.9 - 10.3	10.3
94	4.9	4.9 - 10.4	10.4
95	5.0	5.0 - 10.6	10.6
96	5.1	5.1 - 10.7	10.7
97	5.1	5.1 - 10.8	10.8
98	5.2	5.2 - 10.9	10.9
99	5.2	5.2 - 11.0	11.0

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Alternative measurements and considerations



Alternative measurements and considerations

Step 1: BMI (body mass index)

If height cannot be measured

- Use recently documented or self-reported height (if reliable and realistic).
- If the subject does not know or is unable to report their height, use one of the alternative measurements to estimate height (ulna, knee height or demispan).

Step 2: Recent unplanned weight loss

If recent weight loss cannot be calculated, use self-reported weight loss (if reliable and realistic).

Subjective criteria

If height, weight or BMI cannot be obtained, the following criteria which relate to them can assist your professional judgement of the subject's nutritional risk category. Please note, these criteria should be used collectively not separately as alternatives to steps 1 and 2 of 'MUST' and are not designed to assign a score. Mid upper arm circumference (MUAC) may be used to estimate BMI category in order to support your overall impression of the subject's nutritional risk.

1. BMI

- Clinical impression – thin, acceptable weight, overweight. Obvious wasting (very thin) and obesity (very overweight) can also be noted.

2. Unplanned weight loss

- Clothes and/or jewellery have become loose fitting (weight loss).
- History of decreased food intake, reduced appetite or swallowing problems over 3-6 months and underlying disease or psycho-social/physical disabilities likely to cause weight loss.

3. Acute disease effect

- Acutely ill and no nutritional intake or likelihood of no intake for more than 5 days.

Further details on taking alternative measurements, special circumstances and subjective criteria can be found in *The 'MUST' Explanatory Booklet*. A copy can be downloaded at www.bapen.org.uk or purchased from the BAPEN office. The full evidence-base for 'MUST' is contained in *The 'MUST' Report* and is also available for purchase from the BAPEN office.

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Alternative measurements: instructions and tables

If height cannot be obtained, use length of forearm (ulna) to calculate height using tables below.
(See The 'MUST' Explanatory Booklet for details of other alternative measurements (knee height and demispan) that can also be used to estimate height).

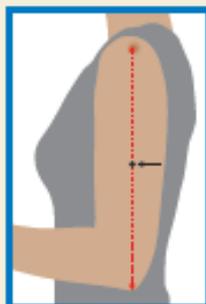
Estimating height from ulna length



Measure between the point of the elbow (olecranon process) and the midpoint of the prominent bone of the wrist (styloid process) (left side if possible).

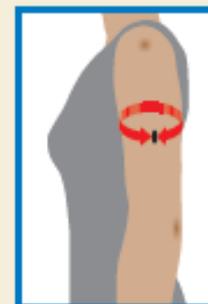
Height (m)	men (<65 years)	1.94	1.93	1.91	1.89	1.87	1.85	1.84	1.82	1.80	1.78	1.76	1.75	1.73	1.71
	men (≥65 years)	1.87	1.86	1.84	1.82	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.67
Ulna length (cm)		32.0	31.5	31.0	30.5	30.0	29.5	29.0	28.5	28.0	27.5	27.0	26.5	26.0	25.5
Height (m)	Women (<65 years)	1.84	1.83	1.81	1.80	1.79	1.77	1.76	1.75	1.73	1.72	1.70	1.69	1.68	1.66
	Women (≥65 years)	1.84	1.83	1.81	1.79	1.78	1.78	1.75	1.73	1.71	1.70	1.68	1.68	1.65	1.63
Height (m)	men (<65 years)	1.69	1.67	1.66	1.64	1.62	1.60	1.58	1.57	1.55	1.53	1.51	1.49	1.48	1.46
	men (≥65 years)	1.65	1.63	1.62	1.60	1.59	1.57	1.56	1.54	1.52	1.51	1.49	1.48	1.46	1.45
Ulna length (cm)		25.0	24.5	24.0	23.5	23.0	22.5	22.0	21.5	21.0	20.5	20.0	19.5	19.0	18.5
Height (m)	Women (<65 years)	1.65	1.63	1.62	1.61	1.59	1.58	1.56	1.55	1.54	1.52	1.51	1.50	1.48	1.47
	Women (≥65 years)	1.61	1.60	1.58	1.56	1.55	1.53	1.52	1.50	1.48	1.47	1.45	1.44	1.42	1.40

Estimating BMI category from mid upper arm circumference (MUAC)



The subject's left arm should be bent at the elbow at a 90 degree angle, with the upper arm held parallel to the side of the body. Measure the distance between the bony protrusion on the shoulder (acromion) and the point of the elbow (olecranon process). Mark the mid-point.

Ask the subject to let arm hang loose and measure around the upper arm at the mid-point, making sure that the tape measure is snug but not tight.



If MUAC is <23.5 cm, BMI is likely to be <20 kg/m².
If MUAC is >32.0 cm, BMI is likely to be >30 kg/m².

The use of MUAC provides a general indication of BMI and is not designed to generate an actual score for use with 'MUST'. For further information on use of MUAC please refer to *The 'MUST' Explanatory Booklet*.

Factors influencing body weight (The MUST report)

Care should be taken when interpreting the patient's BMI or percentage weight loss if any of the following are present

Fluid Disturbances

OEDEMA

MILD	MODERATE	SEVERE
1kg	5kg	10kg

ASCITIES

MILD	MODERATE	SEVERE
2.2kg	6kg	14kg

(The Parenteral and Enteral Nutrition Group of the British Dietetic Association)

Plaster Casts

UPPER LIMB CAST <1kg

LOWER LEG AND BACK = 0.9 – 4.5kg, depending on material and site

Pregnancy

Early Pregnancy – use self-reported or documented weight and height

Weight change:

Weight gain <1kg or >3kg per month during 2nd and 3rd trimester generally require further evaluation

Lactation

Use measured BMI

Weight change – as for oedema

Amputations

BMI:

If using estimated or recalled weight adjustments of body weight can be made from knowledge of missing limb segments

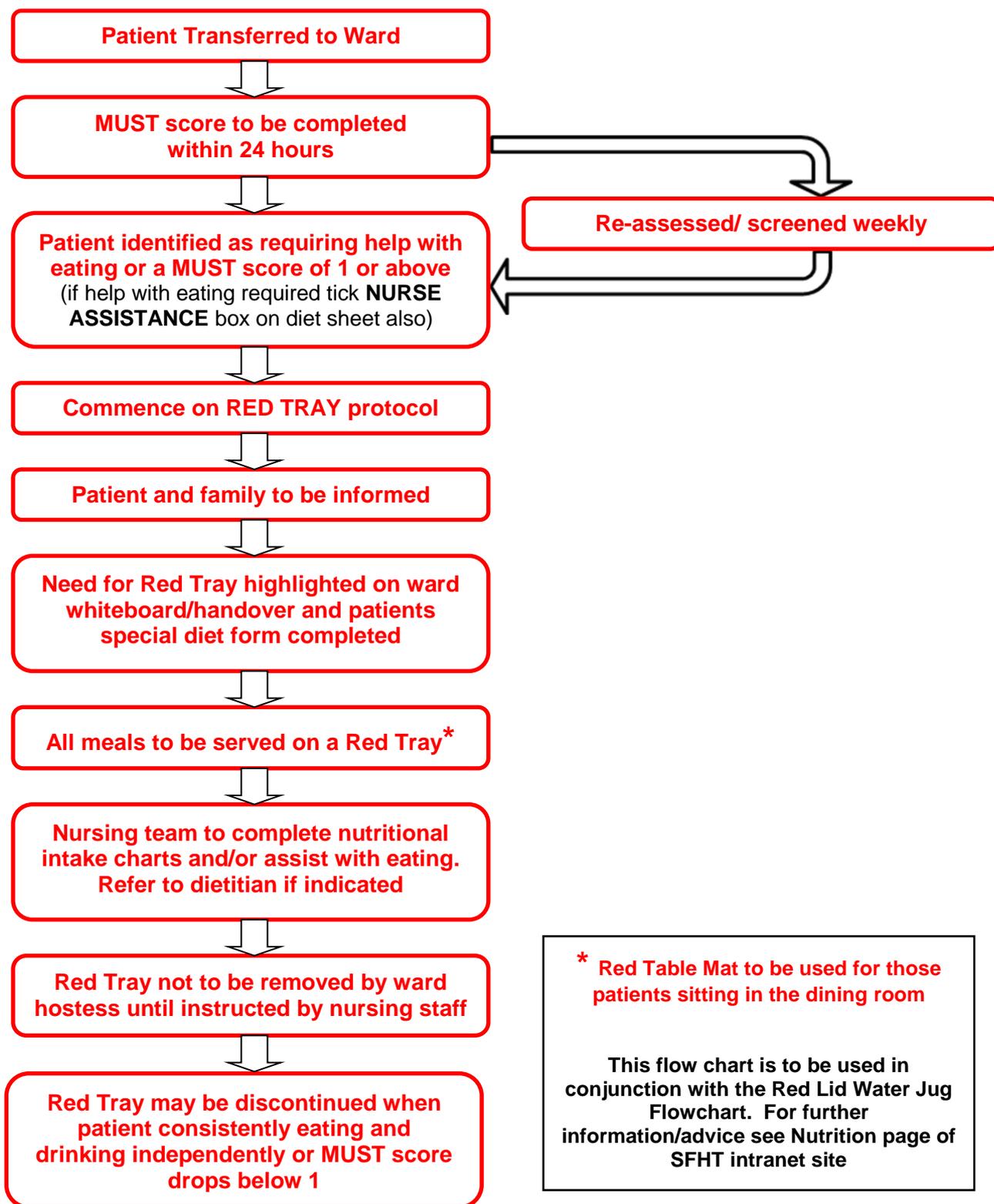
Upper limb 4.9% (upper arm 2.7%, forearm 1.6%, hand 0.6%)

Lower limb 15.6% (thigh 9.7%, lower leg 4.5%, foot 1.4%)

Appendix B – Red Tray Flowchart



The initiative allows patients who require assistance to eat and/or who need their intake monitoring to be easily identified



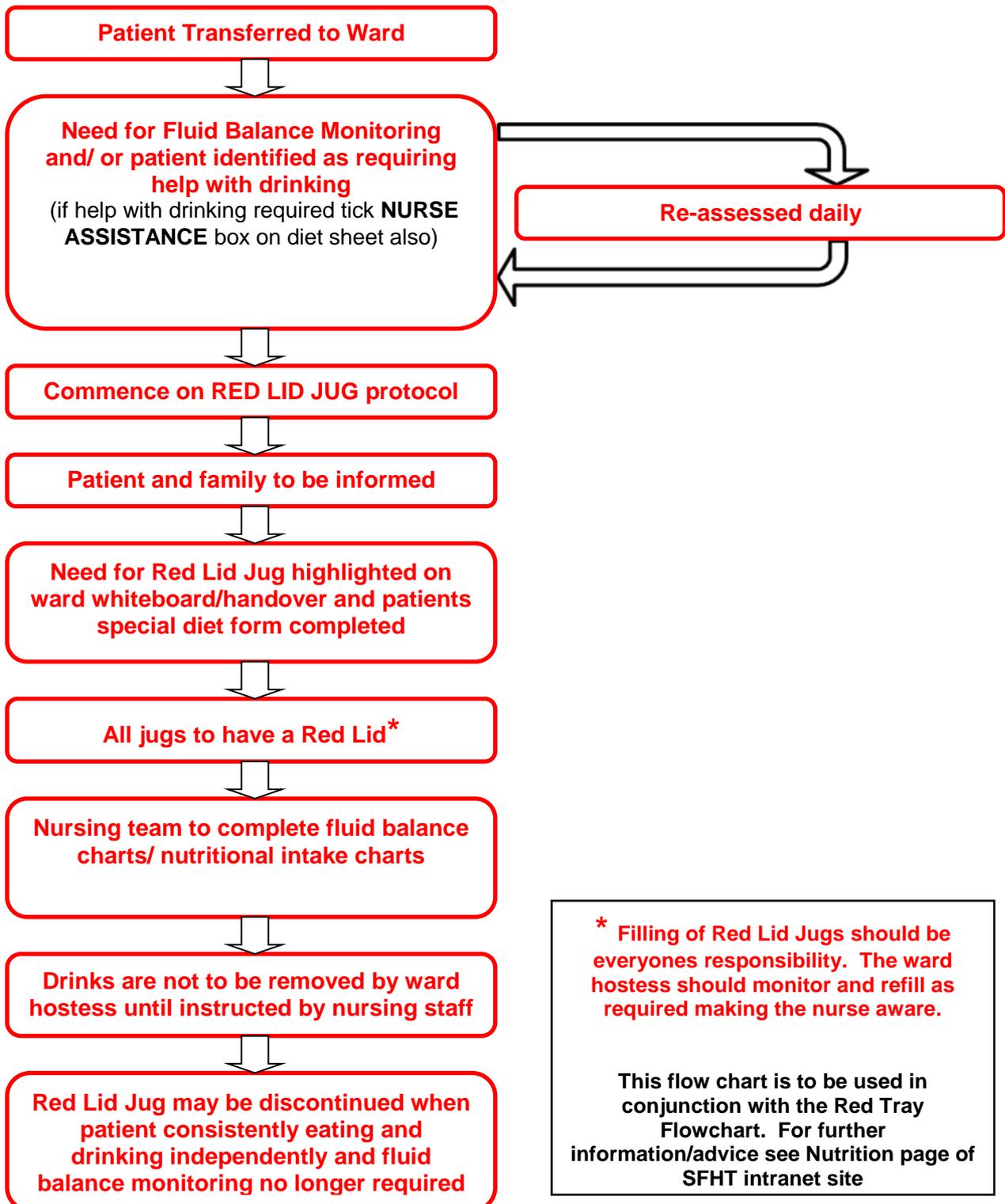
*** Red Table Mat to be used for those patients sitting in the dining room**

This flow chart is to be used in conjunction with the Red Lid Water Jug Flowchart. For further information/advice see Nutrition page of SFHT intranet site

Appendix C – Red lid jug flowchart



The initiative allows patients who require assistance to drink and/or who need their fluid intake monitoring to be easily identified



Appendix D – Adult Inpatient Dietetic Referral Guidance

All dietetic referrals must be completed on ICE

Reasons for Referral

The dietetic department can accept the following reasons for referral:

- 1) Enteral feeds: Naso Gastric (NG) / PEG or Gastrostomy / Naso Jejunal (NJ) / Jejunostomy
- 2) Parenteral feed: PN or TPN
- 3) Gastro: Elemental Feed
 Exclusion / Elimination Diet
 IBS dietary advice
 IBD dietary advice
 Constipation
 Coeliac Disease
 Liver disease dietary advice
 Pancreatitis dietary advice
- 4) Diabetes: Newly diagnosed
 Dietary review
- 5) Renal: Low Potassium
 Low Sodium
 Low Phosphate
- 6) Food allergy
- 7) Texture modification dietary advice
- 8) Nutrition Support: Poor intake
 MUST score 1+ and no improvement with Care Plan B
 MUST score 3+
 Oral nutritional supplements
- 9) Pressure Ulcers – grade 3 or 4

APPENDIX F – EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/procedure being reviewed: Nutrition and Hydration Policy			
New or existing service/policy/procedure: Existing			
Date of Assessment: 29/11/2019			
For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)			
Protected Characteristic	a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?	b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?	c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality
The area of policy or its implementation being assessed:			
Race and Ethnicity	No direct impact identified	Appropriate menu options available	None identified
Gender	No direct impact identified	Not applicable	None identified
Age	This policy covers adults and infants, children and young people (excludes neonates)	References and links to age specific information	None identified
Religion	No direct impact identified	Appropriate menu options and facilities available	None identified
Disability	The policy promotes mandatory safe practice for all adults, infants, children and young people. Patients are assessed on admission with regards to their individual nutrition and hydration requirements including physical disability, learning disability and cognitive impairment.	Appropriate menu options available – <ul style="list-style-type: none"> written and picture menus large print menu braille menu modified texture diet and fluids are available adapted cutlery and crockery available appropriate seating and environment Traffic light documents are available for patients with learning disabilities. Allied health professional assessments of patients requirements. Patients with cognitive impairment through acute delirium or dementia are assessed where required using the two stage capacity	None identified

		assessment and best interest check list. All of these help to determine what reasonable adjustments may be required to meet nutrition and hydration requirements.	
Sexuality	No direct impact identified	Not applicable	None identified
Pregnancy and Maternity	No direct impact identified	Breast feeding mothers are included within the trusts nutrition and hydration provision	None identified
Gender Reassignment	No direct impact identified	Not applicable	None identified
Marriage and Civil Partnership	No direct impact identified	Not applicable	None identified
Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation)	No direct impact identified	Not applicable	None identified
What consultation with protected characteristic groups including patient groups have you carried out? <ul style="list-style-type: none"> No direct consultation undertaken as no specific barriers identified 			
What data or information did you use in support of this EqIA? <ul style="list-style-type: none"> Review of evidence from knowledge and library service review 			
As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments? <ul style="list-style-type: none"> None identified 			
Level of impact From the information provided above and following EQIA guidance document Guidance on how to complete an EIA (click here), please indicate the perceived level of impact: Low Level of Impact For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.			
Name of Responsible Person undertaking this assessment: Hazel Saddington, Sally Fletcher & Kerry Morris			
Signature: Hazel Saddington, Sally Fletcher, Kerry Morris			
Date: 29/11/19			

APPENDIX G – ENVIRONMENTAL IMPACT ASSESSMENT

The purpose of an environmental impact assessment is to identify the environmental impact, assess the significance of the consequences and, if required, reduce and mitigate the effect by either, a) amend the policy b) implement mitigating actions.

Area of impact	Environmental Risk/Impacts to consider	Yes/No	Action Taken (where necessary)
Waste and materials	<ul style="list-style-type: none"> • Is the policy encouraging using more materials/supplies? • Is the policy likely to increase the waste produced? • Does the policy fail to utilise opportunities for introduction/replacement of materials that can be recycled? 	No	
Soil/Land	<ul style="list-style-type: none"> • Is the policy likely to promote the use of substances dangerous to the land if released? (e.g. lubricants, liquid chemicals) • Does the policy fail to consider the need to provide adequate containment for these substances? (For example bunded containers, etc.) 	No	
Water	<ul style="list-style-type: none"> • Is the policy likely to result in an increase of water usage? (estimate quantities) • Is the policy likely to result in water being polluted? (e.g. dangerous chemicals being introduced in the water) • Does the policy fail to include a mitigating procedure? (e.g. modify procedure to prevent water from being polluted; polluted water containment for adequate disposal) 	No	
Air	<ul style="list-style-type: none"> • Is the policy likely to result in the introduction of procedures and equipment with resulting emissions to air? (For example use of a furnaces; combustion of fuels, emission or particles to the atmosphere, etc.) • Does the policy fail to include a procedure to mitigate the effects? • Does the policy fail to require compliance with the limits of emission imposed by the relevant regulations? 	No	
Energy	<ul style="list-style-type: none"> • Does the policy result in an increase in energy consumption levels in the Trust? (estimate quantities) 	No	
Nuisances	<ul style="list-style-type: none"> • Would the policy result in the creation of nuisances such as noise or odour (for staff, patients, visitors, neighbours and other relevant stakeholders)? 	No	