Standards for the Weighing of Infants, Children and Young People in the Acute Health Care Setting

RCN guidance for children’s nurses and nurses working with children and young people
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- Gwent Healthcare NHS Trust

- Leeds Teaching Hospitals NHS Trust
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- Swansea Hospital
- Wirral University Teaching Hospital
- Yorkhill NHS Trust

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This publication has been revised in May 2017, recognising concerns with rising childhood obesity, to support and signpost nurses in practice to recent initiatives and to encompass up-to-date reference and resources.

This publication is due for review in May 2019. To provide feedback on its contents or on your experience of using the publication, please email publications.feedback@rcn.org.uk

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Standards for the weighing of infants, children and young people in the acute health care setting

*RCN guidance for children’s nurses and nurses working with children and young people*

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Introduction

This document outlines the RCN’s position in relation to the weighing of infants, children and young people in the acute setting. For the purposes of this document, the term ‘child’ is used to refer to an infant, child or young person under the age of 19 years (National Service Framework (NSF) for children, young people and maternity services: standard 7, Department of Health (DH) 2003; National Service Framework (NSF) for children, young people and maternity services in Wales, Welsh Assembly Government (WAG) 2005).

The weighing of children is an essential skill for all nurses caring for children of all ages. The Nursing and Midwifery Council has specified the standards (NMC, 2010) which nurses must achieve to enter the professional register, including the ability to:

- select valid and reliable assessment tools for the purpose required
- systematically collect data regarding health and functional status of individuals, clients and communities through appropriate interaction, observation and measurement
- analyse and interpret data accurately and take appropriate action.

In many instances a child’s weight will be measured and recorded by health care assistants and nursing students, under the direction and supervision of a registered nurse. For the purposes of this document, the term ‘practitioner’ is used to refer to both the registered nurse and the un-registered member of the nursing team except where it is indicated otherwise.

This document focuses primarily on the weighing of children in the acute hospital setting. Its key aims are to identify best practice and to ensure consistency in practice across the UK.

These aims are particularly important in light of the findings of a survey undertaken by members of the RCN Paediatric Benchmarking and Standards Community which highlighted wide variation in all aspects of practice (for example, the equipment used and whether clothing was removed or not) and a lack of formal training in relation to accurate methods of weighing children.

Of the 35 organisations that responded to the survey, 22 indicated they had no local standard or policy on the weighing of children in place, confirming the need for this document.

Background

The possible difficulties regarding the role of the nurse in relation to growth measurements were highlighted by an investigation undertaken by Stoner and Walker (2006) into the growth monitoring practices in a children’s unit of a large NHS teaching trust hospital.

Their initial audit uncovered wide variations in practice and also found that some areas did not either have the relevant equipment, or that available equipment was not working properly. As a result of these findings, guidelines for practice were developed, new equipment purchased, several standards developed and a teaching programme devised to support the implementation of the guidelines.

However, further audits of practice revealed that the standard of growth measurement did not improve. Stoner and Walker questioned whether nurses regard growth monitoring as having less value than their wider role and concluded:

“Whatever the reason, growth monitoring in children does not seem to be perceived as a high priority by nurses and other health care professionals.”

Stoner and Walker (2006)

The Stoner and Walker study findings highlighted the need for further work in this area and provided the context for the development of this standards document.

It is important to clarify that this guidance does not cover the intricacies of growth monitoring and therefore does not address the methods of obtaining other measurements such as height/length or head circumference.

Should further information be required on additional aspects of growth monitoring and/or nutrition screening tools, the reader may find it helpful to access the resources listed in Section 7.
The key reasons for weighing children

It is essential to obtain a reliable weight measurement for a child for the following reasons.

**To facilitate the accurate calculation of drug doses**

In the *Standards for medicines management* the NMC (2010) clearly states that as part of administering medication, the registered nurse must record the weight of the patient on the prescription sheet for all children. A child’s weight may be measured by an unregistered member of nursing staff who has been assessed as competent in this skill and who is working under the direction and supervision of a registered nurse.

The British National Formulary for Children (BNFC) highlights the need to obtain a correct measurement of a child’s weight to ensure the accurate calculation of drug doses. Many of the doses for children in the BNFC are standardised by weight. Doses are calculated by multiplying standardised measures by the child’s body weight in kilogrammes.

The need for accurate weight measurements in relation to drug doses is also indicated in the *National Service Framework (NSF) for children, young people and maternity services: standard for hospital services* (DH 2003) and the *National Service Framework (NSF) for children, young people and maternity services: standard for hospital services in Wales* (WAG, 2005). These documents state that hospitals should have in place policies and procedures relating to safe medicines practice, including the weighing of all children, to ensure the accurate calculation of drug dosages.

In addition, accurate weight measurement is also an essential requirement for the correct calculation of intravenous and oral fluids and oral and enteral feeds.

**To facilitate accurate growth monitoring and nutritional assessment**

Normal growth is a sign of good health in infants and children. Healthy children receiving adequate nutrition and living in an emotionally supportive environment follow a steady growth pattern which can be monitored, in part, by measuring and plotting their weight at regular intervals and comparing it to their height centile.

Measurement of a child’s height and weight is the key method of identifying disorders of growth. The routine monitoring of height and weight for growth assists in the diagnosis of problems which might either be missed or become apparent later in life when treatment may be less successful (British Society for Paediatrics and Endocrinology).

Weighing a child provides the opportunity for all nurses to observe the child’s general health and be alert to any safeguarding concerns. All nurses and health professionals who are required to assess and monitor children, which includes obtaining weight measurements, must receive an appropriate level of training in safeguarding children. This will ensure that they are aware of the significance of observing and assessing the whole child and being alert to indicators that might give cause for concern such as growth measurements. For example, a diagnosis of failure to thrive or increased weight gain in hospital may indicate parental neglect at home and such concerns will need to be explored further.


Results from the National Child Health Measurement Programme, 2014/15 indicate that currently 9.5% of boys and 8.7% of girls (all children 9.1% in Reception year (aged 4-5 years) and 20.7% of boys and 17.4% of girls (all children 33.2%) in year 6 (aged 10-11 years) are also classified as obese according to the British 1990 population monitoring definition of obesity (<.95th centile) (National Child Measurement Programme 2014/15).
Best practice standards in relation to the weighing of children

1

Education and training

Standards

• All registered nurses, nursing students and health care assistants who observe and monitor children are trained and competent in weight measurement and documentation according to their level of responsibility.

• The registered nurse maintains accountability to ensure non-registered staff are trained and competent in any nursing skill, including obtaining accurate weight measurements.

• The practitioner is trained in the accurate use of weighing equipment and maintains this competence by receiving regular updates.

• All practitioners require comprehensive induction training when joining a new health care organisation. Obtaining accurate weight measurements is a vital component of induction.

• Registered nurses must keep their knowledge and skills up to date (NMC, 2015).

• Ward sisters/charge nurses, team leaders, practice development nurses, endocrine nurse specialists and dieticians are in an ideal position to teach staff how to weigh children correctly. Only a competent registered nurse is able to assess the competence of registered or non-registered members of the nursing team.

Practice criteria

The practitioner will have undergone theoretical and practical training in relation to the following:

• legal and professional issues
• anatomy, physiology and disease process
• normal development of children across the age range
• recognition of a sick child and prioritising actions and care needs
• holistic assessment of a sick child including obtaining an initial weight
• normal and abnormal parameters for weight in children
• the use, limitations and risks associated with weighing devices
• obtaining the most accurate weight using metric and not imperial measurements
• methods of assessing and measuring weight in children
• action to take when a weight measurement is outside normal parameters
• the accurate recording of weight measurements on the appropriate age related chart and correct monitoring purpose (see Standard 4)
• safeguarding issues to ensure awareness of the significance of growth measurements which may lead to, for example, concerns regarding parental neglect.

Other important elements are:

• consent and assent
• preparing the child to gain full participation
• therapeutic holding skills
• maintaining privacy and dignity in all age groups
• age appropriate information-giving and communication with family and other health personnel
• distraction techniques
• general observation of the infant, child or young person
• medical devices, indications for use, limitations and safety
• adverse incident reporting
• raising concerns regarding unsafe practices when weighing the child or availability of appropriate equipment.
The following competence suggests the indicators which could be adopted by each health care organisation in relation to nursing staff at all levels.

<table>
<thead>
<tr>
<th>Competence indicators</th>
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<tr>
<td>1st level Health care assistant (HCA)</td>
<td>2nd level (junior registered nurse RN/senior HCA)</td>
<td>3rd level (senior RN)</td>
<td>4th level (experienced RN)</td>
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<td>After obtaining consent from the patient or parent:</td>
<td>After obtaining consent from the patient, 1 plus:</td>
<td>After obtaining consent from the patient, 1 &amp; 2 plus:</td>
<td>After obtaining consent from the patient, 1, 2 &amp; 3 plus:</td>
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<tr>
<td>a) Ensure scales used are correct for age of child</td>
<td>a) Discuss two reasons for weighing a child</td>
<td>a) Discuss what measures should be taken if weight is wrongly recorded (for example, in lbs)</td>
<td>a) Able to teach other health care staff how to weigh a child</td>
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<tr>
<td>b) Discuss and demonstrate how to calibrate and set to record using metric (kgs) measurement</td>
<td>b) Discuss types of equipment for different age groups</td>
<td>b) Discuss what measures may need to be put in place to ensure weight recording is acted upon</td>
<td>b) Ensure all staff that are weighing children are competent (explain procedure) and where competences can be checked</td>
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<tr>
<td>c) Discuss how to ensure scales have been checked by medical engineering</td>
<td>c) Discuss how to calibrate equipment</td>
<td>c) Discuss when to refer to a dietician</td>
<td>c) Manage and ensure weight has been accurately recorded on child's percentile chart and the Parent Held Child Health Record</td>
</tr>
<tr>
<td>d) Discuss method for obtaining an accurate weight across the age range</td>
<td>d) Discuss where to record a weight</td>
<td>d) Discuss age appropriate preparation and distraction techniques for procedures</td>
<td>d) Demonstrate competence in undertaking an estimated weight (includes use of parent/staff when holding a child)</td>
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<tr>
<td>e) Demonstrate knowledge of age-appropriate skills to prepare child and family for procedure and promote co-operation</td>
<td>e) Discuss the frequency and the examples of when the same time, similar clothing and same day of week should be used for consistency (for example, eating disorders) when recording a weight</td>
<td>e) Discuss other general observations that can be undertaken during procedure</td>
<td>e) Able to articulate how to interpret weight measurement</td>
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<td>f) Discuss how to maintain privacy and dignity</td>
<td>f) Discuss in detail all the relevant clinical records where a weight is required (incl. Parent Held Child Health Record)</td>
<td>f) Discuss percentile charts and types</td>
<td>f) Undertake audit/benchmark to ensure standards are in place for the correct weighing of children</td>
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<td>g) Discuss appropriate action considering the child's gender, culture and religious beliefs - if child refuses to remove excess clothing - if a child refuses to be weighed</td>
<td>g) Discuss who is accountable for accurate recording of weight and who is responsible for unregistered staff (RN to countersign)</td>
<td>g) Demonstrate competence in plotting weight on growth charts and the relevance of referring to the height and head circumference measurements to get an accurate and full assessment (RN only with training)</td>
<td>g) Act as an expert resource: advising, teaching and supporting members of the health care team, patient and family/significant others</td>
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<td>h) Discuss who to inform following the procedure (weight recording)</td>
<td>h) Discuss expected response if weight is significantly higher or lower than last recording is outside set parameters</td>
<td>h) Discuss who to report to if any concerns or abnormal observations are identified</td>
<td>h) Proficient in adverse incident reporting when recording any equipment errors or incident.</td>
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<tr>
<td>i) Discuss where a weight would need to be recorded</td>
<td>i) Discuss relevance of dietary intake, feeding charts, exercise and medication in relation to weight measurements</td>
<td>i) Discuss physiological status/child development and abnormal parameters</td>
<td></td>
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<td>j) Demonstrate how to accurately record the weight in the patient's clinical records including the Parent Held Child Health Record</td>
<td>j) Discuss limitations and risks associated with weighing devices.</td>
<td>j) Discuss how to estimate a child's weight.</td>
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### Education resources to support your development


### Author: | Department: | Review date:
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### Record of achievement

To verify competence please ensure that you have the appropriate level signed as a record of your achievement in the boxes below.

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Choice and maintenance of equipment

The importance of the equipment used to weigh patients was highlighted in the National Medical Weighing Project which was established by Local Authorities Coordinators of Regulatory Services (LACORS) in 2008. The project was initiated following a series of pilot studies undertaken in 2007 which suggested that there may be problems associated with the equipment used in hospitals for weighing patients.

Council trading standards officers tested hospital scales as part of the nationwide study; 46% of UK local authorities participated and 203 hospitals were visited. Significant findings of the final interim report of the project (LACORS, 2009) included:

- 33% of all hospital scales tested were found to be inaccurate
- only 16% of the hospitals visited provided training for their staff in how to use the equipment correctly
- just under 33% of the hospitals visited did not inspect their equipment at all
- 75% of hospitals held an inventory of the equipment on site, however many of these records were not kept up to date and the inspectors found many unrecorded scales when they visited the hospitals
- 40% of the scales assessed were ‘switchable’ – in other words they could display metric, imperial and other units. The key risk is that a drug dose could be calculated based on a readout that was assumed to be metric.

As a result of these findings, LACORS developed a set of recommendations which have become the basis for the following standards.

Standards

- One department in each hospital or health care organisation is responsible for the procurement, provision and maintenance of all weighing equipment for that organisation.
- Each health care organisation ensures that a programme of testing for their equipment is in place.
- Training for the use of weighing equipment is incorporated into each trust’s training and induction procedures.
- Any equipment which is found to be inaccurate is removed from service and either repaired or replaced.
- All new weighing equipment is of Class III (suitably precise for medical applications).
- Scales purchased for medical purposes are only capable of metric display. There must be no capacity for switching or dual readouts.
- Accurate records of servicing of equipment must be kept.
- All weighing equipment is cleaned between different patients in accordance with local infection control policies.
Obtaining accurate weight measurements across the age range

Standards

- There is an organisation-wide policy which describes:
  - the timing and frequency of weight measurement and
  - a method of obtaining accurate weight measurements across the age range including clothing which can be worn or must be removed; preparation for the procedure; the weighing procedure itself and how to estimate weight when necessary.
- An agreed method for obtaining or estimating the weight of critically ill children.
- Agreed actions to take if there are concerns regarding a weight measurement.

Practice criteria

A child’s weight is determined as soon as possible after admission to an acute hospital environment, as most medicines and fluids are given as the dose per kilogram of body weight.

It may be impractical to weigh the child on scales in an emergency situation or if the child’s clinical condition prevents an accurate measurement. Weight estimation can be used in these circumstances using the appropriate calculation.

The frequency of weighing is considered for each individual child and recorded in the care plan.

The child’s privacy and dignity is maintained at all times.

Visual observation, listening and communication are used when obtaining a weight measurement. This includes taking note of the views of the child and parent/carer regarding the weight measurement including concerns regarding any recent weight loss or weight gain.

Obtaining a reliable weight is not usually done in isolation but rather as an integral part of the holistic assessment and monitoring of the child. This includes the assessment, measurement and monitoring of vital signs as well as the observation of appearance and behaviour.

Obtaining a weight measurement is used, where necessary, as an opportunity to provide health education and advice on nutrition and healthy lifestyle options.

General

The child and/or parent/carer should consent to weight measurement.

Where possible, the child and parent/carer should assist the practitioner in obtaining a reliable weight measurement.

Timing and frequency of weight measurement

Each child must have their weight measured and recorded when attending an acute hospital setting such as OPD, A&E, CALI or a pre-assessment clinic, or when admitted to a ward setting. It is good practice to record the weight at a consistent time each week/day (and that the time is documented).

The frequency of weighing a child will depend on medical need.

If admission is longer than seven days, then the child must be weighed at least weekly (Macqueen, Bruce and Gibson, 2012).

Daily measurements should only be used to indicate fluctuations in fluid status.

A child’s weight should be measured on discharge if he/she has a chronic condition or has been in hospital for longer than seven days depending on diagnosis.

Where necessary, weight measurements are shared with primary care staff to promote continuity of care on discharge and families are informed of this.
Clothing

The Child Growth Foundation (2012) identifies best practice as follows:

- 0 to two years of age – naked
- over two years of age – minimal clothing
- nappies, shoes or slippers and the contents of pockets must always be removed.

If, for any reason, clothing has not been removed or if a child is weighed with additional equipment (for example, a splint, cast, medical equipment or dressing) this must be recorded in the child’s clinical notes.

A child who is unable to sit or stand should be weighed in light clothing on a hoist scale.

If a young person refuses to undress, then this must be documented in their clinical notes.

A private environment must be ensured, preferably a room with a lockable door.

Preparation for weighing a child or young person

Weighing scales must be checked, cleaned and calibrated prior to use.

The scale must be on a flat hard surface.

The child must be prepared for the procedure by being given an age-appropriate explanation. In the case of a young child who may be frightened, it may be appropriate to involve a play specialist to provide distraction therapy.

Obtaining the child’s weight should be postponed if the child is unsettled or upset. In this case, the practitioner must clearly document the reason for not taking the measurement and must ensure that the weight is recorded as soon as possible.

The weighing procedure

The suggested types of equipment according to a child’s age are as follows:

- 0 to two years of age – baby scales
- over two years of age – either sitting or stand on scales
- a child with complex needs may need to be weighed in a hoist with age appropriate slings.

The child or young person must be placed centrally on the scales with their feet slightly apart.

The reading must then be taken when the child is still and documented accordingly (see Section 3). Children under two years of age should be weighed to the nearest 10g (1/100th of a kg) and children over the age of two weighed to the nearest 100g (1/10th of a kg).

The weighing scales must be thoroughly wiped down between patients.

Methods for weight estimation

(Advanced Life Support Group 2016)

There are two methods for weight estimation:

- the Broselow tape method uses height to determine weight; a tape is laid along the length of the child with the approximate weight being read from the appropriate calibration
- in the formula method, if the age of the child is known and is between one and 10 years of age, then (age+4) multiplied by 2 = the approximate weight in kilogrammes.

Whatever method is used it is essential that the practitioner is familiar enough with it to use it quickly and accurately under pressure.

It is recommended that an actual weight be obtained as soon as the child’s clinical condition allows.

Action to take if there are concerns regarding a weight measurement

A single weight measurement is of limited value when assessing a child’s nutritional status and does not reflect rate of growth.

Where there are concerns regarding a weight measurement, the child or young person and 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.
The nurse must be aware of appropriate action to take in relation to any concerns regarding weight measurement including how and when to refer to the dietetics department.

Weight measurement may raise concerns regarding safeguarding, so the healthcare practitioner must be aware how to escalate concerns to relevant senior staff.

Current concern with the increase in child/young person obesity will require height measurement and referral to the dietetics department.

Tared weighing

It may be necessary to weigh the child in the arms of a parent, carer or colleague should the child refuse to stand still (this is known as tared weighing).

To obtain the most accurate weight of a child using this method please ensure that the parent/carer removes their shoes and stands on the weighing scales first. Obtain the weight of the parent/carer and record this. The undressed child should then be handed to the parent/carer and the total weight must be recorded. Then subtract the weight of the parent/carer from the total weight to obtain the child’s weight. Best practice documentation would be to record that a ‘tared weight’ was required, state who was weighed and show both weights as well as the subtraction result as in the child’s weight. If the initial reason for ‘tared’ weight was a distressed and uncooperative child and the child subsequently becomes more compliant, then an actual weight should be attempted.

If the parent/carer is very heavy, e.g. more than 100kg, and the infant is relatively light, e.g. less than 2.5kg, the infant’s weight may not register on the scale. In such cases, ask a lighter person to hold the infant (Central Manchester University Hospitals NHS Foundation Trust, 2010).

Specialist weight estimation

Specialised equipment for obtaining weights in children such as ‘weighing beds’ may be used in specific areas such as Renal Units, Paediatric Intensive Care Units and Burns Units where the weight of the child is essential to managing their condition but normal equipment such as weighing scales cannot safely be used. Wherever specialist weighing systems are in use these departments will ensure that specific induction and training on this equipment is provided.
Record keeping

Standards

- There is an organisation-wide policy describing best practice in recording weight measurements.
- The policy incorporates the assessment, measurement, monitoring and recording of a child’s weight and includes actions which must be taken in response to deviations from the normal or other changes.
- The policy identifies whose responsibility it is to record the weight measurement on a growth chart.
- All weight measurements are recorded contemporaneously and clearly in accordance with NMC guidance for record keeping (2010).
- Actions taken in response to interpretation of weight measurements are clearly documented in the child’s health care record including the Parent Held Child Health Record (PHCHR).
- The charts used for recording and monitoring weight measurements are suitable for use in the care of children across the age range.

Practice criteria

The child’s weight must be recorded in kilogrammes, with the date, in the following documentation:

- the health care record
- the admission assessment record
- the parent held record (where appropriate)
- the prescription chart
- the theatre checklist (where appropriate)
- the child’s growth chart
- the child’s discharge documentation (in order to share information about the child’s weight with community staff).

In addition, information obtained from the wider assessment of the child should be documented.

The nurse will have undergone theoretical and practical training in relation to the following:

- the accurate plotting of weight measurements on growth charts where it is their responsibility to do so, as identified in their trust policy.
- the interpretation of previous and current measurements and their relationship to each other.

The UK World Health Organization (WHO) Growth Charts (RCPCH 2016) for children from birth to four years of age are based on the WHO Child Growth Standards which describe the optimal growth of healthy breast-fed babies. These charts have been in use for all new births and new referrals in England (from May 2009) and in Wales and Scotland (from January 2010). The existing UK90 Growth Charts can be used for children born before this date and for children aged over four years of age.

The RCPCH produce UK WHO 0-4 years and the UK school age charts 2-18 years WHICH are plotted on age and months. Some centres may still be using decimalised charts, so the nurse needs to aware of this prior to plotting on the chart.

Other charts in circulation are as follows:

Early years chart 0-4 years, Neonatal and Infant Close Monitoring chart, Personal Child Health Record (PCHR), UK Down Syndrome chart 0-18 years, School age charts 2-18, Childhood and Puberty Close Monitoring Chart and Body Mass Index chart (RCPCH 2013) cited in Glasper, Coad and Richardson (2015).
Audit of practice and benchmarking

Audit tool

The following templates can be adapted in order to audit practice and to benchmark with other centres.

1 Choice and maintenance of equipment

(a) Are all the following available for use?

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Baby scales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Sit on scales</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>c) Stand on scales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Hoist scales for children with complex health care needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Weighing bed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Broselow tape</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Equipment maintenance

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Is there an inventory spreadsheet detailing record of service history, maintenance and repair of all scales?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Is calibration checking undertaken and recorded with documentary evidence available to support this?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Are all scales zeroed prior to use with documentary evidence available to support this?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Are all scales cleaned before and after use with documentary evidence available to support this?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Are kilogrammes used and is there documentary evidence to confirm this?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Has a risk assessment been done on weighing children with disabilities and special needs to minimise any manual handling challenges?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2 Education and training

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a) Are staff trained and assessed as competent in specific equipment used to measure weight?

b) Can staff estimate child’s weight (age+4) x 2 to determine accuracy of measurement obtained?

c) Do staff have an awareness and understanding/knowledge and skills relating to weight measurement and growth and development specific disease processes (for example, renal unit would have different criteria from eating disorder unit)?

3 Practice

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

a) Are staff able to enlist the cooperation of the child/young person through appropriate explanation?

b) Do staff choose most appropriate equipment and use equipment correctly (including calibration/cleaning/decontamination before and after use)?

c) Is the child prepared – psychologically – for weighing through medium of play?

d) Is the child prepared physically for weighing – removal of shoes etc?

e) Do staff take appropriate action on completion of assessment of weight of a child?

f) Do staff adhere to the risk assessment plan for weighing disabled children?

4 Record keeping

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Is there a suitable weight chart available for plotting the weight of the range of children within the clinical areas?

Is there a complete range of growth percentile charts available for continuous monitoring of weight?

Is there evidence of a nursing care plan indicating frequency of weights, time to be undertaken etc (for example, anorexic needs same day/same time/same clothes maybe weekly or fortnightly)?

Is there evidence to show that the obtained weight has been acted upon where applicable – for example, renal patient and fluids adjusted or failure to thrive seen by dietitian for review of feeds?

Is the parent-held record book updated for all infants, including those with special needs

Are there records of staff training?
Weight measurement benchmark

Score relates to practice on/in team/practice/ward/area:

Trust/organisation:

Comparison group member:                      Date to be scored:                      Date form to be returned:

By:  (insert name)                      _ _ / _ _ / _ _

Scored by:                      Date scored:  Copied:  Y/ N                      Posted on:  _ _ / _ _ / _ _

Date comparison group meeting to share good practice and compile action plan:

To be attended by:  (insert name)

Re-score date agreed:

_ _ / _ _ / _ _

Agreed patient/client focused outcome

Overall outcome:
The child’s weight is measured, monitored and recorded accurately using the most appropriate equipment

Definition:
A child
A family
Who, what, where, etc.

Indicators/information that highlight concerns which may trigger the need for benchmarking activity:

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>BENCHMARK OF BEST PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The child is central to all care and interventions</td>
</tr>
<tr>
<td>2</td>
<td>Children’s weight is measured and recorded as required for that individual and is accurate</td>
</tr>
<tr>
<td>3a</td>
<td>Child’s weight is integral to ongoing care/treatment plan</td>
</tr>
<tr>
<td>3b</td>
<td>Child is comfortable/accepts the need to be weighed</td>
</tr>
<tr>
<td>4</td>
<td>Child’s and family’s views are listened to and acted upon</td>
</tr>
<tr>
<td>5</td>
<td>Health care professionals are skilled in the use of weighing equipment, understand the methods of measuring children, and accurately record weight and report findings</td>
</tr>
</tbody>
</table>
Factor 1: The child is central to all care and interventions

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>BENCHMARK OF BEST PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The child is central to all care and interventions</td>
</tr>
</tbody>
</table>

Outline below the practices undertaken by your service that move towards this best practice statement:

Outline below the barriers that prohibit you from undertaking practice that moves towards this best practice statement:

### Types of evidence include:

- Patient satisfaction surveys
- PALS contributions/complaints/reflections
- Philosophy demonstrates child as central – child-friendly environment
- Philosophy – common to benchmark – include in Children’s Act, etc.
- National Association of Health Play Specialists
- Evidence of change in practice/service to highlight that child is central
- UN Declaration on the Rights of the Child
- Human Rights Act
- Protocols, policies and guidelines
- Evidence of child’s views

Statements to stimulate comparison group discussion around best practice include:

- How are privacy, dignity and religious beliefs addressed?
- Evidence of child-friendly timetable for treatment regimes
Factor 2: Child-focused weight assessment

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>BENCHMARK OF BEST PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Child-focused weight assessment</td>
</tr>
</tbody>
</table>

Outline below the practices undertaken by your service that move towards this best practice statement:

Outline below the barriers that prohibit you from undertaking practice that moves towards this best practice statement:

Types of evidence include:

<table>
<thead>
<tr>
<th>Types of evidence include:</th>
<th>Statements to stimulate comparison group discussion around best practice include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A range of weighing equipment is available, and appropriate selection is achieved</td>
<td>Are the child and family always involved, how do we integrate them in planning?</td>
</tr>
<tr>
<td>Weighing equipment is serviced at least annually</td>
<td></td>
</tr>
<tr>
<td>Play specialist is available to assist child in complying with weight measurement</td>
<td>How do we enable child/family to manage/cope with equipment in hospital?</td>
</tr>
<tr>
<td>Guidelines for weight measurement</td>
<td></td>
</tr>
<tr>
<td>Policies, protocols and guidelines to support weight measurement – for example, record keeping, health and safety</td>
<td>Who, what, where, when and how?</td>
</tr>
<tr>
<td>Audit department evidence</td>
<td></td>
</tr>
<tr>
<td>Database of weight and other growth measurement tools/methods – accessing information – web journals, etc</td>
<td></td>
</tr>
<tr>
<td>Evidence of evaluation exists within the assessment document</td>
<td></td>
</tr>
<tr>
<td>Evidence of consistency in use of equipment – for example, time of day, clothing – where regular weighing is required</td>
<td></td>
</tr>
<tr>
<td>Evidence of child-friendly information including consent and choices</td>
<td></td>
</tr>
<tr>
<td>Partnership – family-centred care</td>
<td></td>
</tr>
</tbody>
</table>
**Factor 3(a): Appropriate action is taken following weight measurement**

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>BENCHMARK OF BEST PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3(a)</td>
<td>Appropriate action is taken following weight measurement</td>
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</table>

Outline below the practices undertaken by your service that move toward this best practice statement:

Outline below the barriers that prohibit you from undertaking practice that moves toward this best practice statement:

Types of evidence include:

<table>
<thead>
<tr>
<th>Statements to stimulate comparison group discussion around best practice include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight charts, centile charts and parent held records are accurately completed as appropriate</td>
</tr>
<tr>
<td>Where a weight highlights concern and requires immediate action, there is evidence within the assessment and evaluation that appropriate action has been taken – for example, loss of weight in a new born infant</td>
</tr>
<tr>
<td>Where a weight requires a long-term management plan there is evidence of multi professional collaboration/including where appropriate referral to community staff</td>
</tr>
</tbody>
</table>
Factor 3(b): Child is compliant and engages in process

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>BENCHMARK OF BEST PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3(b)</td>
<td>Child is comfortable/accepts the need to be weighed</td>
</tr>
</tbody>
</table>

Outline below the practices undertaken by your service that move toward this best practice statement:

Outline below the barriers that prohibit you from undertaking practice that moves toward this best practice statement:

Types of evidence include:

| Statements to stimulate comparison group discussion around best practice include: |
| Who, what, where, when and how? |
| How are staff made aware of involving children in decision making? |
| Play specialist is available to assist child in complying with weight measurement |
| Audit of above – efficiency and safety |
| How do you initiate the child and family into weight management? |
| Evidence and partnership |
| Evidence of child friendly information, consent and choices |
| Evidence of delaying weight measurement to obtain child’s assent/consent and cooperation |
Factor 4: Child-focused communication

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>BENCHMARK OF BEST PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Child-focused record keeping, documentation and communication</td>
</tr>
</tbody>
</table>

Outline below the practices undertaken by your service that move toward this best practice statement:

Outline below the barriers that prohibit you from undertaking practice that moves toward this best practice statement:

Types of evidence include:

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence of child’s views</td>
<td>User involvement (Pt satisfaction/PALS/audit)</td>
</tr>
<tr>
<td>Evidence of children being listened to and acted upon their views</td>
<td>Transcultural issues addressed?</td>
</tr>
<tr>
<td>Patient satisfaction surveys, PALS audit</td>
<td>Who, what, where, when and how?</td>
</tr>
<tr>
<td>Care pathways</td>
<td></td>
</tr>
<tr>
<td>Parents understand information sharing may occur</td>
<td></td>
</tr>
</tbody>
</table>
## Factor 5: Competence

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>BENCHMARK OF BEST PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Competence</td>
</tr>
<tr>
<td></td>
<td>Health care professionals are skilled in the use of weighing equipment, understand the methods of measuring children, and accurately record weight and report findings</td>
</tr>
</tbody>
</table>

Outline below the practices undertaken by your service that move toward this best practice statement:

Outline below the barriers that prohibit you from undertaking practice that moves toward this best practice statement:

<table>
<thead>
<tr>
<th>Types of evidence include:</th>
<th>Statements to stimulate comparison group discussion around best practice include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses, training, learning development updates</td>
<td>How do health care professionals maintain competence?</td>
</tr>
<tr>
<td>Protocols</td>
<td>How is competence among health care professionals measured?</td>
</tr>
<tr>
<td>Patient satisfaction surveys</td>
<td>What support mechanisms exist for training and development? Link nurse. MDT</td>
</tr>
<tr>
<td>Support mechanism – link nurse</td>
<td>What resources exist for training and development?</td>
</tr>
<tr>
<td>Competence – audit of</td>
<td></td>
</tr>
<tr>
<td>Generic training for health care professionals</td>
<td></td>
</tr>
<tr>
<td>Clinical student training pack</td>
<td></td>
</tr>
</tbody>
</table>
References


Nursing and Midwifery Council (2008a) *Standards for medicines management*, London: NMC.


Resources


Now I understand: consulting parents on chart design and parental information for the UK-WHO child growth charts.

Looking at obesity trends in primary school children.
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Children’s perspectives on height and weight screenings.

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Infant and Toddler Forum (www.infantandtoddlerforum.org)


The RCN represents nurses and nursing, promotes excellence in practice and shapes health policies

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