LRI Children's Hospital

Guidelines for weight measurement (Baby and Children)

Staff relevant to:	Clinical, Nursing and Healthcare staff working within the UHL Children's Hospital.
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1. Introduction

The weighing of children is an essential skill for all nurses and healthcare assistants caring for babies, children and young people. This guideline is for weighing in the acute hospital setting. Weighing a child or young person is essential for the following reasons:

- Correct measurement of weight is essential for prescribing medication and drug calculations.
- To identify any abnormal growth. Growth is monitored by measuring and plotting a child's weight at regular intervals on a centile chart.
- Measurement of a child's height and weight is the key method of identifying disorders of growth and is an indication of the general health and wellbeing of a child.
- Weighing a child provides the opportunity for nurses to observe the child's general health and be alert to any safeguarding concerns.
- Growth monitoring also assists in the management of obesity.

A child's weight should be determined as soon as possible after admission to hospital or as soon as the child's condition allows. Children attending outpatient departments should have their weight recorded. An estimated weight can be used in emergencies or if the child is not able to be weighed but an accurate weight should be recorded as soon as possible.

If a child is an inpatient for more than 7 days then they should be weighed twice weekly.

All health professional who are required to assess and monitor children, which includes weight measurements, must receive an appropriate level of training in safeguarding children. This ensures 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.

Staff undertaking the measurement must be trained in the use of the weighing equipment.

Specific training requirements can be found in section 3, Education and Training.

Related documents:

Weighing of Well Term Babies UHL Obstetric Guideline

Faltering Growth UHL Childrens Hospital Guideline

Infant Feeding Policy UHL LLR and Childrens Centre Services

2. Equipment & Procedure

Appropriate weighing scales – to measure in kilograms only and calibrated twice yearly.

- 0 to 2 years – baby scales
- Over 2 years – either sitting or standing on scales
- Wheelchair scales are available in out-patients and Ward 11

Full range of World health organisation (WHO) growth charts.

2.1 Preparation and Consent

Inform the parent and child or young person if appropriate of the procedure, obtaining verbal consent.

Infants 0-2 years should be weighed naked

Over 2 years should be weighed in light clothing. Shoes should always be removed and pockets emptied.

2.2 Weighing a Baby

Action	Rationale
1. Position the baby scales on a flat hard surface. Ensure the equipment is cleaned before use.	To ensure accuracy. An uneven surface can distort measurements and to prevent infection.
2. Explain to the parent that the measurement of weight is required, the reason for the measurement, what it entails and how long it is likely to take.	To obtain verbal consent
3. Ask the parent to undress the baby or undress the baby if parent is not present. Ensure that the nappy is removed.	A wet nappy, can weigh more than 0.5 kg and therefore provide a false weight
4. Place paper towel, towel or small blanket into the lying area.	For the baby's comfort
5. Zero the scales	This process calibrates the scales and ensure an accurate reading
6. The reading must then be taken when the child is still. Children under two years of age should be weighed to the nearest 10g.	To obtain an accurate weight
7. Once the measurement is taken and verified by another person if necessary, take the baby off the scales and re-dress the baby.	Recording accurate body weight is a fundamental part of patient assessment and inaccurate measurements can lead to wrong dose of medications being prescribed. Accurate weight measurement is also an essential requirement for the correct calculation of intravenous and oral fluids as well as enteral feeds.
8. Document measurement immediately in the appropriate place, i.e. notes or drug chart. Plot on centile chart if required.	To minimise the risk of error. The WHO centile charts indicate a baby's size compared with babies of the same age and maturity who have shown optimum growth. They provide valuable information about the baby's growth and development.

2.3 Weighing a child

Action	Rationale
1. Select appropriate scale: Sitting or standing. Place the scales on a flat hard surface. Ensure the equipment is cleaned before use.	To ensure accuracy and prevent infection.
2. Explain to the child or young person that the measurement of weight is required, the reason for the measurement, what it entails and how long it is likely to take.	To obtain verbal consent and keep patient/guardian informed.
3. Ask the child and parent to remove any heavy items of clothing such as coats, shoes, socks, sweatshirts or cardigans/ jumpers also to empty pockets of all items.	A wet nappy, shoes or filled pockets can weigh more than 0.5 kg and therefore provide a false weight.
4. Zero the scales. Sit the child on the seat (dependent on age and physical ability) or stand the child on the scales.	This process calibrates the scales and ensures an accurate reading.
5. Ask the child to stand/sit in the middle of the scale and to remain still until the weight appears on the display.	Lots of movement can distort the measurement, and not standing in the middle of the scales provides an inaccurate reading.
6. The reading must then be taken when the child is still. Once the measurement is taken the child or young person may get of the scale.	Recording accurate body weight is a fundamental part of patient assessment and inaccurate measurements can lead to wrong does of medications being prescribed. Accurate weight measurement is also an essential requirement for the correct calculation of intravenous and oral fluids as well as enteral feeds.
7. Tared weighing can be used for children who are distressed or refuse to sit/stand on the scales. This is when the parent/guardian's weight is subtracted from the combined weight of the adult with the child in their arms. This measurement should be double checked to reduce the margin for error.	To record accurate measurement.

8. Document measurement immediately in the appropriate place, i.e. notes or drug chart. Plot on centile chart if required.	To minimise the risk of error. The WHO centile charts indicate a child's size compared with children of the same age and maturity who have shown optimum growth. They provide valuable information about the child's growth and development.

2.4 Estimating weight (Advance life support group guidelines)

Boys

Age	Guide Weight (kg)
Birth	3.5
1 month	4.5
3 months	6.5
6 months	8
12 months	9.5
18 months	11
2 years	12
3 years	14
4 years	16
5 years	18
6 years	21
7 years	23
8 years	25
9 years	28
10 years	31
11 years	35
12 years	43
14 years	50

Girls

Age	Guide Weight (kg)
Birth	3.5
1 month	4.5
3 months	6
6 months	7
12 months	9
18 months	10
2 years	12
3 years	14
4 years	16
5 years	18
6 years	20
7 years	22
8 years	25
9 years	28
10 years	32
11 years	35
12 years	43
14 years	50

If estimated weight is used ensure that actual weight is measured as soon as possible.

2.5 Weighing a child in a wheelchair

Wheelchair scales are available. The weight of the empty wheelchair, with all bags and excess blankets etc. removed should be subtracted from the combined weight of the child in the wheelchair.

3. Education & Training

Qualified Children's Nurses and Associate Nurses can single check weights after appropriate training and an LCAT assessment (Leicester Clinical Assessment Tool).

Health Care assistants working in Children's Outpatients will receive specific training, LCAT assessment and a yearly update to enable them to single check in this area.

Health Care Assistants in Ward areas can act as a second checker. The registered Nurse maintains accountability to ensure that non-registered staff are trained and competent and must counter sign recorded measurements. (RCN, 2015)

4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Estimated weight is replaced by actual weight as soon as possible	Audit review of records	Matron	2 Yearly	Governance group meeting

5. References

Royal college of Nursing (2017) Standards for weighing of infants, children and young people in the acute health care setting. London, RCN

Child growth Foundation (2012) recommended growth monitoring recommendations. http://www.childgrowthfoundation.org

Nottingham University Hospitals NHS Trust. Nursing Guidelines: Weighing a child/baby September 2016

6. Key Words

Weigh, Scales,

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) Pauline Jones Nurse Specialist	**Executive Lead** Chief Nurse
Details of Changes made during review: **March 2023:** **If an inpatient for 7 days or more, weigh twice weekly on Sunday & Wednesday changed to twice weekly only.**	