G6 | Standard | Special Care Baby Unit moving and handling (M&H)

Systems are in place to cover all reasonably foreseeable situations in

managing moving and handling in a special care baby unit (SCBU)

Justification

Rationale

Particular attention should be given to:-

- Static working postures for staff, when carrying out observations and treatments in SCBU – equipment for use in this area should be provided to enable a suitable working height for all members of staff
- M&H neonates
- Handling heavy loads such as monitors
- Moving paediatric equipment.

Authorising Evidence

HSWA (1974); CNST (2011); MHOR 2004 (as amended); MHSWR (2000)

Links to other published standards & guidance

APCPNG (2011); CSP (2008); DH (2008); DH (2009); HOP4 (1998); HOP 6 (2011); HSC (1998); NBE (2010); NBE (2011); NICE 2010; NPSA (2008); RCN (2011); Ruszala et al (2010); Sweeney et al (2002); Vaivre-Douret et al (2007)

Cross reference to other standards in this document

A4,6,7; B3-5,7-10,12,13; C4,7,8,10-13; D; F1,3,4; G1,5,8,32,40; H1,2; I3,4,6,7,9; J1-4,7,9; K2; L6,8

Appendices

4, 6, 7, 7a, 8, 10, 11, 13, 14, 16, 17, 18, 20, 21, 25, 27, 28

Verification Evidence

- requirements for compliance to achieve and maintain this standard
 - An agreed approach, informed by evidence-based best practice, documented in the M&H policy, disseminated to all staff and embedded within SCBU
 - Risk assessments (for M&H) that are 'suitable and sufficient', robust and balanced
 - Safe systems of work and standard operating procedures
 - Individual person assessments where necessary readily accessible and regularly reviewed
 - Ergonomics is integral
 - Information and communication systems including documentation
 - Competent, healthy staff, in sufficient numbers
 - Training (theoretical and practical) and supervision
 - Link workers are appointed, supported and active
 - An environment conducive to good care (space, layout, etc.)
 - Handling and other equipment that is suitable (fit for purpose) and readily available
 - Investigation of and learning from adverse events, using root cause analysis to locate the cause and prevent a recurrence SFAIRP
 - Monitoring, audit and review of the verification evidence
 - Points learnt from audit, and accident/ incident investigations and reports are disseminated and discussed with staff, with subsequent learning
 - Reporting of the status (level of compliance) to the organisation
 - · Action plans to correct any lack of compliance
 - The culture is one of learning rather than 'blame and shame'
 - Staff work within protocols and record as necessary

G6 Protocol SCBU units (M&H)

Author: Jenny Duncan

Other contributors: Danielle Holmes, Joan Gabbett

1. Introduction and background

SCBU units are classified as to the number of high dependency cots they can hold. So a unit may have differing needs to its neighbouring hospitals.

2. Management, organisation, supervision and support

Management should ensure that trained, updated and competent staff in the handling and movement of neonates, are employed in the neonatal unit (NICE 2010 QS3, RCN 2011 App 2, APCPNG, 2011). Untrained staff in the movement and handling of neonates are monitored by competent mentors (RCN, 2011 App 2).

Parents are encouraged to be involved in planning and providing care (NICE 2010, QS5).

3. Staffing levels

This is dependent on the task involved. Care should always be taken when moving loads and when moving the baby. A risk assessment should be available for the task concerned for example: transporting a baby in an incubator in an ambulance or handling a baby in an incubator at arm's length.

4. Staffing competencies (after Benner, as cited in Ruszala et al, 2010)

Novice – all students, new staff (qualified and un-qualified) regardless of their background. (RCN, 2011 p4 & App 2), and family members.

<u>Advanced beginner</u> - students and new staff with some prior experience of working on a SCBU.

<u>Competent</u> - staff who have been working on the SCBU unit, who have received additional SCBU handling training, who have been supervised in the unit and assessed as such. New staff who have been assessed as competent.

<u>Proficient</u> - the Manual Handling Key Worker/ facilitator who has received additional education, training, supervision and assessment. (RCN, 2011 p14 & App2)

5. Environment

It is particularly important that there is sufficient space around the incubator or cot, so that staff and visitors can move freely. As the baby improves in its condition it may well change nurseries – less space is needed as the incubator is removed.

Staff may be working in a hot environment as it is important that the ambient temperature in SCBUs is kept above 24° C to help maintain the body temperature of small babies (RCN, 2011, p41).

6. Communication and information systems regarding initial referral

All staff on the SCBU should be shown correct positioning, handling and ways of encouraging the baby with normal movement and development.

It is important to show parents how to position their baby (Sweeney & Gutierrez 2002). An information booklet is given to parents explaining the positioning and handling of their baby (Northern Devon Healthcare NHS Trust, undated).

7. Treatment planning

If there is a known long term health condition of the baby then:

- Healthcare workers (handlers) consider their knowledge, training, competence, health and physical capabilities before manual handling, taking into account the setting and available equipment
- All team members handling babies should be taught safe and appropriate ways of moving and handling and should be taught to adopt a consistent approach for any single baby.
- Local teams should provide training opportunities for all staff in moving and handling to enhance the baby's rehabilitation
- The parent/s and/ or handler should be thoroughly trained in the safe and effective use of any equipment supplied
- All team members must be updated with the latest research in particular on positioning of the baby.

Babies and children always start life very light and very dependant, with expectations that they are lifted and carried. There are complex emotions, hopes, worries and adjustments to be made when a new baby arrives even more so if the family become aware of additional problems (NBE, 2011).

8. Moving and handling tasks

These can be made up of both clinical and non-clinical (RCN, 2011 p39) -

- Non clinical moving and handling: for example moving equipment such as incubators, cots, chairs, breast pumps and pulse oximeters.

Clinical moving and handling may involve: gravity tube feeding, washing and nappy changing and holding a baby for a lumbar puncture/ long line insertion, performing procedures in a restricted position over incubators or cots. In addition, helping a lady post delivery to see/ touch her baby for the fist time or assist a breast feeding mother (RCN, 2011 p40). She herself may be quite unwell and requiring assistance to move. Her patient handling risk assessment should accompany her to the unit if needed.

9. Moving and handling assessment

Manual handling risk assessments will focus on all tasks but with particular detail on positioning of the baby. All staff must pay specific attention to the maintenance of safe positioning of the baby, with specific attention to limbs i.e. arms and legs kept in neutral. It is known that keeping premature infants in a neutral position whilst in the incubator can help with their development later on (Sweeney & Gutierrez, 2002; Vaivre-Douret, 2007).

Guidance in the MHORegs as amended (2004) requires a generic or task based assessment to be undertaken to ensure a unit is properly designed and equipped.

All manual handling tasks should also have a risk assessment and plan of action to ensure that risks are reduced or avoided all together (HSC, 1998, HSE, 2000). This information is kept as generic assessments or SOPs on the unit and is accessed by all staff.

10. Methods, techniques and approaches

It is in most cases the mother who may well require help with movement in the first few hours after a delivery. Consideration must also be given to the member of staff who is holding the baby during a procedure due to static posture risks.

11. Handling equipment

There should be a suitable and sufficient amount of equipment available. This will depend on the size of the unit, and would include the following.

- Incubators should be height adjustable.
- Other equipment that will sometimes be required are small sliding boards for seated (sit to sit) transfers if the mum cannot stand up post section.
- Equipment should be mounted on wheels for example breast pumps, ventilators etc. Or there should be sufficient to be wall mounted in high dependency.
- Oxygen and suction portals should be located at approximately mid chest height to enable easy insertion/ removal from the wall.
- There should be a good number of height adjustable stools/ saddle seats for staff and parents to use when they come to the unit.

12. Other equipment and furniture

- It is vital that the unit has chairs for parents with drop down or removable arms to facilitate seated transfers. It is also advisable that the chairs have wheels on the back legs that can be utilised when moving them around the unit, as need dictates, to create a safer system of work for handlers.
- Toilets should have sufficient space for assistance to be given and correctly placed grab rails for visitors. In order to allow access to the toilet in the event of an emergency, the entrance door should have the facility to open either way. At least 1 toilet should allow patient access from both sides of the toilet. The toilet roll should be accessible from either side.
- Showers should be level access, and should have a shower chair to facilitate the less mobile.
- Evacuation in a fire also needs to be addressed. Buscot Evacuation bags may be a solution to carry the baby if stairs are an issue.

13. Risk rating for each task

To carry out a 'suitable and sufficient' assessment, each task should be evaluated as part of the assessment process, so that the <u>level of risk</u> is quantified. Such assessments should be used, wherever possible, in the design of a safe system of work, and in highlighting any residual risks.

Various systems exist, but it is suggested that the NHS risk management 5x5 matrix, with 0-25 scale, is used for an overall evaluation of risk (NPSA, 2008) (see CD1, appendix 9 in folder 5). It is in common use, simple to use with 5 levels of risk, determined by a calculation of the likelihood or probability of an adverse event occurring multiplied by the severity of consequences or impact should it occur.

<u>Likelihood/Probability (0-5) x Severity of Consequences or Impact (0-5) = 0-25</u>

The values below are based on this system. Calculations lead to the following possible scores or ratings: -

These ratings can then be used to alert staff, to prioritise action and justify any necessary expenditure to make the situation safer, on the basis of reasonable practicability. Options can be evaluated by considering risks, costs, and actions planned or taken, to reduce the level of risk to the lowest level that is reasonably practicable, which can thus be demonstrated.

In SCBU the postural risks to the staff are probably more significant than M&H. For assessing postural risks and those associated with tasks other tools are available, such as RULA (Hignett S & McAtamney L, 2006), REBA (Hignett S & McAtamney L, 2000) and OWAS (Karhu et al, 1977). These not only look at postures but forces.

14. Alerting the M & H team

Should any problems arise and/or there is a problem moving equipment the MHP should be contacted.

15. Referral to, and involvement of, other specialists

Babies may be referred to physiotherapists and other specialists whilst in SCBU dependant on their clinical diagnosis.

16. Transport

The baby may need to be moved to another SCBU or department either in his incubator, a transport incubator, or cot, dependant on his condition. If in either incubator, the usual factors concerned with pushing and steering forces as well as the weight of the incubator will need to be taken into account. If in a cot, the above considerations for pushing and steering will need to be followed.

17. Discharge and transfer planning

This should start as soon as possible after admission (DH, 2009, p9). The primary goal is to enable the baby to return home. Some children with known issues will be followed up under paediatric out patients and will receive physiotherapy there.

18. References

Health and Safety at Work etc Act (1974) Reprinted 1994 London: TSO Ch 37 Sections 2 & 7

Brady, A Smith, P (2011) A Competence Framework and Evidence -based Practice Guidance for the Physiotherapist working in the Neonatal Intensive Care and Special Care Unit in the United Kingdom Association of Paediatric Chartered Physiotherapists Neonatal Group London: CSP p23-27, 1.2.6, 3.1.4, 3.1.5, 3.2.3

Benner P (1984) From novice to expert. Excellence and power in clinical nursing practice Boston: Addison-Wesley pp 13-34 as cited in Ruszala S, Hall J and Alexander P (2010) in Standards in Manual Handling Towcester: NBE

CSP (2008) Guidance on Manual Handling in Physiotherapy 3.3.1 London: CSP

DH (2009) *Toolkit for high quality neonatal services* www.dh.gov.uk/en/Healthcare/Children/Earlyyears/index.htm

HSC (1998) Manual Handling in the Health Services para 47-49 Sudbury: HSE Books

HSE (2000) L21 The Management of Health and Safety at Work Regulations 1999

Approved Code of Practice & guidance 2nd ed Regs 3,4 & 5

HSE (2004) *L23 Manual handling Manual Handling Operations Regulations 1992* (as amended) Guidance on Regulations 3rd Ed paras 48 & 51 Sudbury: HSE Books

Hignett S. and McAtamney L. (2000) *Rapid Entire Body Assessment (REBA)* Applied Ergonomics 31:201-205

Hignett S & McAtamney L (2006) *REBA and RULA Whole body and Upper Limb rapid assessment tools* in Karwowski W & Marras WS (Eds) the Occupational Ergonomics Handbook (2nd ^{ed}) Boca Raton FI CRC Press 42-1-42-12

Karhu O, Kansi P, Kuorinka I (1977) *Ovako Working-posture Analysis System* in Applied Ergonomics Vol 8 Issue 4 p199-201

NBE (2010) *Standards in Manual Handling* 3rd edition www.nationalbackexchange.org

NBE (2011) Manual Handling of Children - Professional Series Volume 2 www.nationalbackexchange.org p17

National Back Pain Association in collaboration with RCN (1998) *The Guide to The Handling of Patients* rev 4th Ed p 199 Teddington NBPA /RCN

NHSLA (2011) Clinical Negligence Scheme for Trusts Maternity Clinical Risk Management Standards version 1, Standard 5 Criterion 3 www.nhsla.com retrieved 23.01.12

NICE (2010) Quality standard for specialist neonatal care London: NICE http://www.nice.org.uk/media/17A/A8/SpecialistNeonatalQualityStandardRevisedOct10.pdf retrieved 23.01.12 Quality statements 3, 4, 5, 7

Northern Devon Healthcare Trust (undated) *Parental Information on Positioning* for Premature Babies

www.northdevonhealth.nhs.uk/pastientinformation/obstetrics/positioning babies. https://doi.org/10.1016/j.jub/html retrieved 25.03.12

NPSA (2008) National Patient Safety Agency *A Risk Matrix for Risk Managers* www.npsa.nhs.uk Retrieved 18.02.13

RCN (2011) RCN Competences Competence, education and careers in neonatal nursing: RCN guidance www.rcn.org.uk retrieved 23.01.12 London: RCN p4, p14, App 2

Rose, P. (2011) *Training Strategies* Chapter 6 page 82 in The Guide to the handling of people. 6thEd Teddington: BackCare.

Sweeney, Jane K. PT, PhD, PCS; Gutierrez, Teresa PT, MS, PCS (2002) Musculoskeletal Implications of Preterm Infant Positioning in the NIC in Journal Perinatal & Neonatal Nursing volume 16 issue 1 p 58-70 Vaivre-Douret, Laurence PhD, OTR; Golse, Bernard MD, PhD (2007) *Comparative Effects of 2 Positional Supports on Neurobehavioral and Postural Development in Preterm Neonates in the NIC* in Journal Perinatal & Neonatal Nursing Volume 21 - Issue 4 - p 323-330

19. Further Reading

RCM (1999) Handle with care a midwife's guide to preventing back injury 2^{nd} ed London: RCM

Other useful web sites

Buscot Evacuation bags

http://www.hospitalaids.co.uk/evacuation_equipment/buscot_babevac_cot

http://www.flemingmedical.ie/buscot-babevac

Summary/Key Messages

- The intention of the entire strategy and standards document is to contribute to the improvement of: -
 - The quality of care 'patient experience' (dignity, privacy and choice)
 - clinical outcomes
 - Patient/ person safety
 - Staff health, safety and wellbeing
 - Organisational performance cost effectiveness and reputation, etc.
- The standard for G6 is:

Systems are in place to cover all reasonably foreseeable situations in managing M&H in a special care baby unit

- > Skilful M&H is key
 - Special points for G6 are: -
 - Handling neonates requires the adoption of sound M&H principles because: -
 - of their vulnerability
 - the presence of attachments
 - the tendency of staff to underestimate the postural strain arising from not holding the load close and working at a sub-optimal height
 - Static working postures for staff
 - Handling heavy loads such as monitors and incubators
 - Moving paediatric equipment