G39	Standard	Moving and handling issues in persons requiring seating

Systems are in place for the assessment of patients / service users (SUs) and the provision of **specialist furniture and equipment** for those with certain conditions.

Justification

Rationale

Some patients and service users need special seating to control their posture, enhance pressure care, preserve tissue viability, improve their comfort and facilitate independence and function.
Appropriate seating of a more basic kind (e.g. correct seat height) can make a significant difference to patient independence and the amount of handling required.

Authorising Evidence

Nothing specific.

Links to other published standards & guidance

HOP5 (2005) ch 12 & 14; NPSA (2008); Ruszala et al (2010) + see References and Further reading.

Cross reference to other standards in this document

B7,8,13; D1-4,8,9,11; G8-10,15,16,21,24,40; I6; J4,5

Appendices

4, 6, 7-10, 14, 21

Verification Evidence

- requirements for compliance to achieve and maintain this standard

Standard seating:

- Equipment audits of wards and departments
- Ward/ departmental risk assessments
- Procurement standards for patient seating
- Budget line for repair, refurbishment and replacement.

Specialised seating:

- Equipment audits for wards and departments
- Policy or procedure for accessing specialised seating
- Seating requirements included in patient/ SU documentation
- Reports on seating needs evaluation/ review across organisation and actions
- Minutes of relevant committees
- Arrangements for planned preventive maintenance and refurbishment
- Service records
- Budget line for replacement and development of specialised seating.

G39 Moving and handling issues in persons requiring seating

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Please note this protocol does not cover seating assessments and provision provided through wheelchair services.

1. Introduction and background

Literature indicates patient seating, though equipment central to quality of care, has often received inadequate attention (Collins, 2001). Being able to sit out promotes breathing and other functions as well as posture, rehabilitation, and early mobilisation.

Chair design affects a person's ability to rise up from sitting, a frequent element of treatment by physiotherapists also carrying staff injury risk (Ruszala and Musa, 2005). Unsuitable seating or sitting out too long beyond a patient's/ service user's (SUs) tolerance can damage health, in particular tissue viability. Providing the right chair for each patient/ SU is therefore essential.

A range of seating should be available to meet the patient's/ SUs needs.

If a patient/ SU is on a pressure relieving/ reducing system whilst in bed, they are likely to require a similar system when sitting out.

2. Management, organisation, supervision and support

2.1 The importance of understanding the role of the member of staff assessing patients/ SUs for seating

There needs to be understanding by individuals in senior management positions of the importance that seating plays in good patient/ SU care. The allocation of resources by management should reflect this understanding.

2.2 Procurement guidelines

Procurement guidelines on the specification of seating to be purchased need to be formulated with the assistance of competent professionals with clinical experience.

2.3 A policy needs to be in place for the use of specialised seating

This policy needs to include the assessment for its use, the method of attainment, the operational elements of deploying the equipment and also the procedures for evaluating whether its provision has been a success.

2.4 The use of documentation

Seating needs should be included on the patient/ SU handling assessment and care plan documentation. Particular issues to be recorded should include

individual patient/ SU seating needs and any issues pertaining to their transferring abilities, support required, his or her positioning and timescales for when events need to occur.

2.5 Multi-disciplinary team working

Good multi-disciplinary team working on individual patient/ SU seating issues should take place. This might need to include more complex transfers and positioning. Physiotherapy and/ or occupational therapy staff will take a lead in this process and support other staff.

3. Staffing levels

3.1 Sufficient staff

There needs to be sufficient staff on duty during a shift to get patients/ SUs in and out of seating and also in and out of bed. Required sitting regimes need to be followed.

3.2 Ensuring that the staff on duty have sufficient skills to deal with M&H and seating issues

There must be staff on duty who know the specific positioning and transfer requirements of patients/ SUs with more complex seating needs.

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

**Training and education on seating is important for all patient/ SU handling staff.

4.1 Advanced beginner: This person will be able to assess seating that is used regularly for patients/ SUs who are independent or who require supervision or prompting. An example is the need for a higher seat for a taller person.

4.2 The competent member of staff: Will be able to assess a person for seating used regularly and of standard provision. He or she will also be able to identify the need for specialised seating and how it can be provided.

4.3 The proficient member of staff: Will be able to assess the patient/ SU with more complex seating needs.

4.4 The expert assessor: Can assess and prescribe for patients/ SUs who need even further complex seating e.g. persons requiring specialised postural support, who have conflicting needs, and where environmental and social factors need to be taken into account.

4.5 Training in the selection of correct equipment

This includes giving staff an awareness of the importance of the correct chair for each patient/ SU, the correct sitting posture and also discussing the procedures for special seating.

4.6 Training in the use of correct equipment

The member of staff or caregiver needs to be trained in the operation of special seating for use in the ward/ community.

4.7 Training in the use of specialised seating

Nurses or therapists who will be assessing patients/ SUs for specialised seating, need to be given training to understand the options and types of special seats that can be utilised. Support should be given for them to develop any required skills. Specialised seating should be available locally and the particular practitioner needs to be aware of the procedure for its assessment and access.

5. The environment surrounding the use of seating

Space is required around the bed for assisted and hoisting transfers. If assistance is required to enable the patient/ SU to stand from a sitting position; enough space either side of the chair must be allowed for access and the safe positioning of the patient/ SU by handlers. This may need to be achieved by moving a bed. Re-arranging furniture to promote enough space can reduce the cumulative handling load and improve efficiency.

6. Communication and information systems

Timely referral, with sufficient initial information to an occupational therapist/ other expert practitioner needs to be made when special seating is required. This should reflect factors that are raised in relation to specialised seating and the generic assessment of the unit. A more detailed risk assessment will be required for complex seating.

7. Treatment planning

7.1 Appropriate care for the patient/ SU

Sitting out of bed may be an important step in enabling other goals to be reached. This could affect motivation, the ability to eat and drink safely, and the possibility of promoting independent personal care and mobilising.

7.2 The progression of care
The sitting ability and tolerance of the person may be improved through a graduated progression from more supportive seating to that providing less support. The duration of sitting in a chair can gradually be increased, if appropriate with other aspects of the care plan.

7.3 Increasing the frequency of sitting in a chair where possible

Sessions should be planned for times of day that can meet other goals, including the wishes of the individual e.g. meal times, visitor times or washing and dressing. The number of staff on duty, their abilities and their availability is important (see section 3 – staffing levels).

*7.4 Sitting patients/ SUs out is generally good but comes with a **Warning**!*

It is important that a patient/ SU is not left sitting out longer than appropriate for that individual as sitting can then turn into a health damaging and de-motivating experience.

8. Moving & handling tasks

8.1 The assessment of seating ability

The assessment of a patient's/ SU's sitting ability, (especially if more dependant) may be required prior to attempting sitting a patient/ SU out in a chair. Positioning in a profiling bed including a 'chair' position may be used requiring minimal handling, whilst sitting on the side of bed may require greater support and assistance from handlers. Tissue viability risks and other factors, such as the patient's/ SU's condition, must be considered.

This assessment may determine whether specialist seating, providing more support, is required. Assessment must continue once the patient/ SU is in a chair to determine suitability of seating, ability to re-position, tolerance to sitting out, and the appropriate length of time. Transfers to and back from the chair must also be assessed. Handling tasks may include a range of transfers.

8.2 Ensuring good positioning

The handler needs to ensure the person is in a good position e.g. well into the back of the seat and in the middle, with feet supported on the floor or footplates as necessary. This may be achieved through supervision, assistance, or positioning in a hoist. For good weight distribution and stability when sitting in an upright position approximately 19% of body weight should be taken through the feet (Collins, 2001). Good alignment including trunk, head, and lower and upper limb position must be enabled. Regular observation of a person's sitting position may be necessary. Losing a good sitting position may indicate a patient/ SU is sitting out beyond their tolerance. Pressure risks may be reduced by intermittent varying of tilt position.

Special seating may require positioning in preparation for transferring the patient/ SU, e.g. tilted back, and entail the re-positioning the patient/ SU whilst he or she is in the chair.

Handling demands for staff can be reduced by varying the orientation of the chair if a 'tilt-in-space' variety is used.

Maintaining patient/ SU position through a tilt-in-space, reclining backrest to accommodate need, with feet supported, provides a good supportive surface,

and patient/ SU comfort, all of which reduce slipping to a poor position and therefore the need to manually re-position the patient/ SU.

Some seating e.g. with riser seat functions may be used as a tool within therapy treatment sessions, as may seat tilt including slight forwards tilt, reducing the effort required in assisting sit to stand for both patient/ SU and carer.

Chairs on wheels allow safe return of the walking patient/ SU who becomes fatigued, and transfers to the appropriate side for patient/ SU rehabilitation. 'Move away' armrests facilitate a variety of transfer approaches.

Certain emergency evacuation systems may utilise specialised patient/ SU seating on wheels to double as a means of horizontal evacuation of some patients.

8.3 Considering patient's/ SU's and staff postures

The patient/ SU needs to be positioned correctly for an activity such as eating, drinking, or dressing so that he or she can do this with comfort and safety. Whilst repositioning the patient/ SU and seating, the handler will need to maintain the best posture for the task.

Adjustment of leg supports and foot rests to support the patient's/ SU's posture may involve handling equipment and limbs near floor level. Care should be taken to avoid a stooped or rotated position or over reaching, for example by kneeling, or by tilting the chair if this is possible, to bring the footrest higher.

Bariatric seating may be designed with some powered adjustments to reduce handling demand.

9. Moving & handling assessment

9.1 Hoisting dependant patients/ SUs into seats

When undertaking a moving and handling assessment, the handler should be aware that the transfer of an acutely ill or more dependent patient/ SU to special seating may be a more complex M&H task requiring additional staff. If there are positioning difficulties, tubes connected, anxiety or behavioural issues to manage, then increased care will be required.

9.2 Fitting a hoist sling in a chair

The positioning of a sling once a patient/ SU is seated in a chair can be a demanding task, especially with patients/ SUs who are more dependent or larger.

The use of 'all day' slings, special 'slippy' slings or slide sheets can help, as can seating that reclines to a 'day bed'.

10. Methods, techniques and approaches for seating provision

10.1 Standard seating

A range of seating which is regularly provided should be available for caregivers to use to ensure suitable seat height and depth. Seating with other dimensions should be available for patients/ SUs of different heights and body builds.

The chair design should facilitate independent or assisted transfers through:

- suitable seat height
- space under the seat for foot placement
- armrests positioned forward to the edge of the seat
- 'move away' armrests for side transfers.

10.2 Bariatric persons

A range of standard seating must be available. (See also G15 – bariatric M&H).

10.3. The attributes of effective seating

Seating on which the patient/ SU may be sitting for some duration (e.g. one hour plus) and/ or for more dependent patients/ SUs, or where tissue viability is a risk, must have a surface and covering that provides good pressure distribution. All seating which is shared by several patients/ SUs needs to be covered with material that can be wiped down to meet infection control standards. (See also G8 – prevention of health care associated infections (HCAIs) whilst M&H).

10.4 Seating in communal areas

The use of low chairs and settees in areas where patients/ SUs require assistance to rise from sitting to standing should be avoided.

Seating in waiting areas therefore must include sufficient chairs suitable for those with impaired mobility, for example with a high enough seat and with armrests extending to the front of the chair.

10.5 The attributes of specialised seating

Ideally the seat height should be adjustable with the patient/ SU sitting in a position which will facilitate a sit to stand procedure when required. The same idea can be applied to the need for patients/ SUs who require side transfers.

More supportive seating combining "tilt-in space" with foot rests, leg-rest supports and a recline facility to accommodate greater postural insufficiency is available. This can assist with patients/ SUs who have restricted hip flexion or other "body-shape" needs.

The ability to tilt in space is useful for those with impaired sitting balance who may have some postural insufficiency, who fatigue quickly, or who are at higher risk of tissue damage. If a tilt-in-space chair is used, the patient/ SU needs to

be well supported – back, head and neck, legs, feet and arms. This will maintain the patient's/ SU's position (prevent sliding), provide a comfortable support and facilitate activities of daily living.

10.6 Maintenance/ refurbishment/ replacement

A planned maintenance, repair and inspection regime must be in place and fully resourced. Provision for ad-hoc repairs should be included where required. Specialised seating usually has moving parts, is subject to heavy use and therefore liable to need repair. Coverings and surfaces are subject to damage or deterioration. Specialised seating is classed as medical equipment by the Medicines and Healthcare products Regulatory Agency (MHRA, 2011).

Standard seating is subject to wear and tear, in particular tears to covering. Deterioration of the foam cushioning can occur over time. A repair, refurbishment and replacement plan should be in place, and properly resourced through a process organised by management.

Periodically a generic assessment and review of seating provision and need should be carried out within specialist areas and across the organisation. This should inform the business case for the replacement or purchase of standard and/ or specialised seating.

10.7 Access arrangements for specialised seating

10.7.1 Storage of specialist seating

Specialised seating may be held on the ward, an identified unit, in a central store in the hospital, or there will be an arrangement for hiring in seating when required. In the community, specialised seating may be provided through Integrated Community Equipment Stores (ICES) or equivalent, arrangements with seating companies, and through continuing care equipment provision.

10.7.2 Ensuring caregivers are aware of where the equipment is stored

Caregivers need to be aware of where the equipment is stored as part of the process for accessing it. They can then inform patients/ SUs of what is happening in relation to obtaining the particular piece of seating.

10.7.3 Keeping patients/ SUs informed

If provision is not to be immediate, patients/ SUs should be kept informed of progress.

11. Handling equipment

The handler must check the safe working load of any seating equipment that may be used. If uncertain the manufacturer should be contacted for this information.

11.1 Compatibility in handling equipment

Hoists need to be compatible with the chair and bed in any moving and handling procedure. The handler should ensure that the hoist legs go around or under the piece of furniture. The handler must also decide whether to approach from the front or side of the chair.

11.2 Using a gantry or ceiling hoist

A gantry or ceiling track hoist may be required, especially for some recliner chairs used for heavier patients/ SUs or if space is at a premium. The handler should assess if the sling used with the hoist achieves the optimum patient/ SU position to assist good sitting in the chair.

11.3 The use of 'all-day' slings

These can be left in situ with a resulting minimisation of pressure damage risks. They can reduce the manual handling demands involved in re-fitting a sling with a patient/ SU in the chair.

11.4 Equipment which helps prevent the patient/ SU sliding forward in the chair

Special equipment is available that the person can sit on which prevents sliding forward in the chair, and also assists in helping the patient/ SU move back to sitting in a more upright position. These are generally called "one-way glides". They are not a substitute for suitable seating design and any impact on tissue viability risks must be considered.

Small sliding boards are available for bed to chair/ wheelchair to toilet seated transfers.

12. Other equipment

N/A

13. Risk rating

The handling associated with the use of standard and specialised seating including the patient/ SU assessment may carry a risk.

To carry out a 'suitable and sufficient' assessment, each task should be evaluated as part of the assessment process, so that the level of risk 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.

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

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

1 – 6 = Low; **8 – 12 = Medium**; **15 – 16 = High**; **20 = Very High**; **25 = Extreme**

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.

14. Alerting the moving & handling team

Specialist seating is a complex area of knowledge in its own right. If there are issues in that assessment which may be unusual and require a more complex assessment to be carried out than the caregiver is able to achieve, the advice of an expert practitioner (MHP/ other expert) should be sought.

15. Referral to and involvement of other specialists

These may include:

- Senior therapists experienced at assessing seating needs for specific patient group.
- Senior practitioners in other fields e.g. within neurology.
- Wheelchair services.
- Tissue viability specialists.

It will be mutually advantageous for seating specialists, MHPs and tissue viability specialists to co-operate in assessing a patient/ SU for seating.

16. Transport (internal & external)

Some specialised seating is designed to be suitable for transporting persons inside the hospital, in the patient's/ SU's home or in vehicles. Patients/ SUs in their own or residential home may benefit from special seating which can be used outside in the garden on a good surface. Pushing/ pulling and steering forces may need to be taken into account, particularly on slopes and over rough ground.

17. Discharge and transfer planning

17.1 Specialised seating after discharge

The caregiver/ practitioner needs to consider if specialised seating will be required in the longer term i.e. on discharge or transfer.

If a wheelchair is likely to be required then referral to the wheelchair service is advisable as early as possible.

If specialised armchair type seating will be required, assessment must include the home environment, and the wishes and needs of the patient/ SU with regards to their daily pattern of activities. The carers and the abilities of any care workers must also be taken into account.

17.2 Agreements on funding

Inter-agency arrangement on funding, assessing for and prescribing specialised seating should be agreed and set out prior to discharge of the patient/ SU from hospital. (See also CD1, sections K1 – partnership working and K2 – Transfers and discharges).

Conclusion

This protocol has hopefully raised in the reader's mind important issues in the use of seating and the implications for M&H.

Firstly there should be adequate provision to meet the full range of patient/ SU need. This should be based on a generic assessment to determine what seating is required.

Secondly providing seating for patients/ SUs can be a complex activity. Specialised skills on the part of the practitioner are required and therefore training is essential.

Thirdly the team of practitioners in a unit need to be aware that the members of that caring team are very likely to have different levels of skills and expertise when assessing persons for seating. For this reason, and the fact that specialist seating is a complex field of care, it is important that the team disseminates information throughout the group of practitioners.

Finally there is scope for collaboration between manufacturers and healthcare practitioners to develop ranges of specialised seating that meet the needs of those who need to sit in specialised seating and those who help move and handle, in their context of use, be it hospital or community.

It is hoped that the evidence base in this field will continue to increase but until then it is anticipated that this protocol has offered some support for the handler who wants to develop their attributes in this aspect of care.

18. References

Benner, P (1984) *From novice to expert; excellence and power in clinical nursing practice* Menlo Park: Addison-Welsey as cited in Ruszala S, Hall J and Alexander P (2010) 3rd Ed Standards in Manual Handling Towcester: NBE

Collins, F (2001) *An adequate service? Specialist seating provision in the UK* Journal of Wound Care 10 (8) 333-337

Ruszala, S & Musa, I (2005) *An evaluation of equipment to assist patient sit to stand activity in physiotherapy* Physiotherapy 91 (1) 35-41

Medicines and Healthcare products Regulatory Agency (MHRA) (2011) DB2011(01) Reporting adverse incidents and disseminating medical device alerts, March 2011 London: DoH http://www.mhra.gov.uk/home/groups/dts-bs/documents/publication/con111568.pdf Retrieved 28th June 2012

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

Further reading

Alexander, P (2005) *Sitting to sitting transfers* in Smith, J. ed The guide to the handling of people 5th edition Teddington: BackCare, with the Royal College of Nursing and National Back Exchange

The Chartered Society of Physiotherapy (2008) *Guidance on manual handling in physiotherapy* 3rd edition London: CSP

Collins, F (2008) *An essential guide to managing seated patients in the community* Wound Care March 2008 539-546

European pressure ulcer advisory panel (EPUAP) and National pressure ulcer advisory panel (NPUAP)(2009) *Treatment of pressure ulcers: Quick reference guide* www.epuap.org

HSE (2004) Manual handling Manual Handling Operations Regulations 1992 (as amended) Guidance on Regulations L23 3rd edition Sudbury: HSE

National Institute for Clinical Excellence (2003) *CG7 The use of pressure relieving devices (beds, mattresses and overlays) for the prevention of pressure ulcers in primary and secondary care* London: NICE http://www.nice.org.uk retrieved 19 January 2012

National Institute for Clinical Excellence (2005) *CG29 Pressure ulcer management: full guideline: The management of pressure ulcers in primary and secondary care: A Clinical Practice Guideline* London: RCN http://www.nice.org.uk/Guidance/CG29/Guidance/pdf/English retrieved 19 January 2012

National Institute for Clinical Excellence (2008) *CG68 Stroke – diagnosis and initial management of acute stroke and transient ischaemic attack (TIA)* http://www.nice.org.uk/nicemedia/pdf/CG68NICEGuideline.pdf retrieved 19 January 2012

Rosenthal, MJ, Felton, RM, Nastasi, AE, Naliboff, BD, Harker, J, Navach, JH (2003) *Healing of advanced pressure ulcers by a generic total contact seat: 2 randomized comparisons with low air loss bed treatments* Archives of Physical Medicine and Rehabilitation 84 (12) 1733-1742

Stockton L, Gebhardt KS, Clark M (2009) *Seating and pressure ulcers: Clinical practice guideline* Journal of Tissue Viability 2009 Nov 18(4):98-108

Thomas, S (2005) *Sitting to standing* in Smith, J. ed The guide to the handling of people 5th edition Teddington: BackCare, with the Royal College of Nursing and National Back Exchange

Examples of seating products and companies

Aircomfort Deluxe bariatric chair/day bed	www.apollo-healthcare.com
Flotech Adjuster allows seat height variation, tilt and forward tilt with patient in chair. Feet supported on floor	www.invacare.co.uk
Hydrotilt and Hydroflex tilt in space and recline, easy to manoeuvre foot support	www.careflex.co.uk
Kirton Duo tilt in space seating	www.kirton-healthcare.co.uk
Bariatric riser recliner chairs	http://www.1stcallmobility.co.uk/ www.apollo-healthcare.com
Bariatric static armchair (Teal)	www.teal.co.uk/healthcare/patient-seating.html

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 G39 is:**

Systems are in place for the assessment of patients/ service users and the provision of specialist furniture and equipment for those with certain conditions.

- **Special points for G39 are: -**
  - **Standard seating**
    - **Equipment audits of wards and departments**
    - **Ward/ departmental risk assessments**
    - **Procurement standards for patient seating**
    - **Budget line for repair, refurbishment or replacement**
  - **Specialised seating**
    - **Equipment audits for wards and departments**
    - **Policy/ procedure for accessing specialised seating**
    - **Seating requirements included in patient/ SU documentation**
    - **Reports on seating needs evaluation/ review across organisation**
    - **Arrangements for planned preventive maintenance and refurbishment**
    - **Service records**
    - **Budget line for replacement and development of specialised seating**