

Health Guidance
Use of Pressure Reducing Support Surfaces/ Devices
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This is an information sheet designed to be of assistance to Care Inspectorate Inspectors and others with like interests. The contents have not been issued as Care Inspectorate policy, but to offer common sense guidance on issues of topical interest which may be of use when reviewing practices and policies.

Developed by: Joyce O'Hare
Professional Adviser Tissue Viability
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Health Guidance on Use of Pressure Reducing Support Surfaces/ Devices

Introduction and purpose of guidance

This guidance note aims to share with Care Inspectorate Inspectors information regarding the types of pressure reducing support surfaces/devices, their use and application and maintenance which are used in care homes/healthcare settings for pressure ulcer prevention and management.

Background

Pressure reducing surfaces or devices are used to reduce and redistribute the overall pressure to the vulnerable bony prominences, such as the sacrum (bottom of the spine) hips, buttocks and heels. (Morison et al, 1999).

Other terms in use are

- therapeutic equipment
- static and/or active pressure reducing equipment
- pressure reducing aids
- airflow mattresses.

Pressure reducing surfaces or devices are split into two categories:

1. Low tech devices – a conforming support surface, for example foam, to redistribute the body weight over a large area.
2. High tech devices – alternating support surface where inflatable cells alternatively inflate and deflate. (RCN, 2005)

These types of devices are available as mattresses, overlays and seat cushions.

Low tech devices usually available in care homes include the following types of mattresses, overlays (which are placed on the existing mattress) and seat cushions:

- Standard foam
- High specification foam such as cubed foam products
- Gel, fluid or air-filled products.

High tech devices usually available in care homes include the following:

- Alternating- pressure mattresses/overlays where the individual lies on air filled sacs, which sequentially inflate and deflate and reduce pressure at the pressure points for periods of time. These devices may incorporate a pressure sensor. Seat cushions are also available in this range of products.
- Low-air-loss overlays/mattresses: the individual is supported on air-filled sacs inflated at a constant pressure, where air is able to pass through.
- Turning beds/frames (kinetic beds): beds that either aid manual repositioning of the service user or reposition the individual by motor driven turning and tilting.

Health guidance

Factors which should be considered when choosing a pressure reducing support surface in the care home setting:

- Level of risk
- Skin assessment/integrity
- Frequency of repositioning required by the service user
- General health status
- Comfort
- Lifestyle and abilities
- Acceptability to the service user
- Cost.

The use of risk assessment tools, for example Waterlow, Braden etc, is useful in identifying an individuals level of potential risk. They should be used as an aide memoire and not a replacement for the nurses' clinical judgement and knowledge of the service user and their overall presentation.

Each care home should have in place a range of low tech and high tech pressure reducing support surfaces to meet the clinical needs of the current service users.

It is considered good practice that an inventory of all pressure reducing support surfaces is kept in the home. This information ideally should contain information such as:

- service users' name or initials
- current risk score
- if skin is intact or broken
- type of support surface they are being nursed on.

The type of support surface is also documented as part of the pressure ulcer prevention/management care plan. Any specific instructions relating to the device should also be recorded in the care plan, for example the setting of the pump on active mattresses where the setting is calculated by the service users' weight.

The types of mattresses that may be seen in care homes are standard divan or NHS issue mattresses although this practice is changing.

Research has shown that pressure reducing foam mattresses outperform these standard mattresses in pressure reduction and comfort (Hampton and Collins, 2004).

Static pressure reducing mattresses and seat cushions such as foam, air or gel filled are suitable for low/medium risk service users. This type of mattress or overlay is manufactured by many therapeutic equipment companies.

Even service users who are not at risk of pressure ulcer development, should still have their comfort needs considered by the care home.

Active support surfaces such as alternating pressure or low air loss systems are suitable for service users assessed as being high risk for pressure ulcer development or those who have already developed pressure damage.

There is no evidence to support the use of the following as pressure reducing aids or devices:

- Synthetic or genuine sheepskins
- Water filled gloves
- Donut type seat cushions (NICE, 2001).

Fibre filled overlays proved a popular product due to cost. This consisted of synthetic fibres in a series of connected cushions. The fibre may be silicone coated, or formed into balls to reduce shear and friction. During laundering these products can lose their efficacy and end up becoming a cause of, rather than a preventative measure for pressure damage.

1. Equipment and Adaptations guidance (2009)

Summary

On inspection The Care Inspectorate Inspector should be aware of the following information:

This guidance aims to assist local authorities and their NHS partners to modernise and integrate their equipment and adaptation services within the wider community care context.

Key points for care homes

The guidance covers all care homes.

Statutory providers (NHS and local authorities) should work with the care home sector to agree the most suitable makes and models of generic, standard equipment.

The guidance lays out some guiding principles for responsibilities in equipment provision in relation to care homes:

- As a person's residence, the care home has a responsibility to ensure that the residence meets the needs of the individual. A care home providing nursing care should have suitable equipment available to meet a range of nursing needs.
- Care home residents do not lose their rights to access NHS services.
- Where someone has been in hospital and the provision of equipment can support early discharge, this equipment must be loaned, with urgency, free of charge up to a period of four weeks.
- Where the provision of equipment can prevent admission to an acute hospital setting then that equipment must be loaned with urgency free of charge for a period of up to four weeks.

- Where equipment has been loaned to a care home, as described above, and it is not the responsibility of the NHS or local authority to provide, clear protocols should be agreed locally between the NHS, local authority and the care home provider on the provision of the equipment after 4 weeks. This could include long-term hire/maintenance agreements or purchase of the equipment from the NHS/local authority or an independent provider. **No equipment should be removed before an alternative, long term option has been identified.**
- Staff must be appropriately trained in the use, cleaning and maintenance of equipment as set out in The Health and Safety Executive and MHRA regulations.
- Where equipment has been loaned to or hired by a care home, repair and maintenance responsibility remains with the equipment provider. The equipment provider must also ensure that appropriate training in the use of the equipment is provided to the care home. It is then the responsibility of the care home to ensure that this training is cascaded to all staff likely to use the equipment.
- Care home staff should have equal access to training in equipment handling. This is of particular importance in terms of:
 - Moving and handling legislation.
 - Communication equipment – staff must be appropriately trained to understand the need to promote and participate in its use.
 - Where ‘care management’ has been delegated to the care home, care home staff must have access to equipment stores

1. Service users and/or their families should be involved in the decision making process regarding the choice of pressure reducing surfaces to meet their clinical needs.

2. Care homes providing nursing care when assessing service users’ needs should include consideration of their therapeutic equipment needs. Service users should not be accepted if the home is unable to meet their assessed needs.

3. Pressure reducing surfaces/seat cushions should be documented within the care plan along with individual repositioning needs. When being nursed on a pressure reducing support surface, service users will still require to be repositioned. The timescales will be individual to each service user and planned over a 24 hour basis and recorded.

4. The care home should have a range of low tech and high tech pressure reducing support surfaces to meet the clinical needs of the current service users (or be able to readily access). This can be kept in the format of an equipment register which is updated depending on use/ clinical need of service users.

5. The availability and choice of pressure reducing support surfaces should form part of the home's Pressure Ulcer Prevention Policy.
6. Staff working in the care home should be aware of local arrangements for provision of active/ static support surfaces. Examples: loan store, private rental or purchase.
7. All staff should receive training in the use of support surfaces such as mattresses/ beds/ seat cushions. All staff should be aware of the procedures to obtain a support surface if a service users' condition deteriorates and actions to take if electric support surfaces break down.
8. Maintenance/ decontamination of active pressure reducing support surfaces should be carried out as per manufacturers' guidance/warranty to ensure optimum efficacy.
9. Turning/ cleaning of static pressure reducing support surfaces should be carried out as per manufacturers' guidance/warranty to ensure optimum efficacy. Cleaning is done with warm water and mild detergents to protect the covering of the product. Turning of these products will enhance the lifespan and allow staff to check for 'bottoming out' where there is an obvious indentation in the centre of the product. This reduces its efficacy and should be replaced.
10. When a service users' condition or skin integrity deteriorates the appropriateness of the pressure reducing support surface should be reviewed.
11. Chair sitting should be limited to a maximum of two hours for those at risk of developing pressure ulcers and a pressure reducing seat cushion in place.
12. Service users with vulnerable heels or heel pressure ulcers may not in all instances require a pressure reducing overlay or mattress. Air filled heel protectors may be sufficient depending on the individual assessment.

Useful links/ further reading

- Cullum N, Nelson EA, Sheldon T (2001) Systematic reviews of wound care management (5): pressure-relieving beds, mattresses and cushions for the prevention and treatment of pressure sores. in Cullum N, Nelson EA, Flemming K et al. Systematic reviews of wound care management: (5) beds; (6) compression; (7) laser therapy, therapeutic ultrasound, electrotherapy and electromagnetic therapy. Health Technology Assessment 5 (9).
- Guidance on the provision of equipment and adaptations (2009). Scottish Government
- Hampton S, Collins F. (2004) Tissue Viability. Whurr Publishers Ltd.
- Morison, M, Moffatt, C, Bridel-Nixon, J, Bale, S. (1999) Nursing Management of Chronic Wounds. Harcourt Publishers Ltd.
- MHRA (2002) Equipped to Care. The safe use of medical devices in the 21st century. A Guide for health care professionals, support workers and managers.

- National Institute for Clinical Excellence: Clinical Guideline 7 (2003) Pressure ulcer prevention. Pressure Ulcer Risk Assessment and Prevention, including the use of Pressure Relieving Devices (beds, mattresses and overlays) for the Prevention of Pressure Ulcers in Primary and Secondary care. NICE, London.
- NHS QIS Best Practice Statement: Pressure Ulcer Prevention. (2nd draft 2005).
- NHS QIS Best Practice Statement: Pressure Ulcer Management and Treatment. (2005).