WHY IS IT IMPORTANT TO GIVE PATIENTS THE RIGHT SUPPORT?

If the person is not adequately supported when lying or sitting, pressure to an area can lead to poor blood flow to the tissues, causing direct damage to cells and tissues. This sensation usually triggers a person to move, relieving the pressure. However, if a person has reduced sensation or is unable to move themselves, the continued application of pressure to an area can cause damage to the skin and soft tissue, resulting in a pressure ulcer. This can happen in as little as two hours. If pressure is unrelieved for long periods of time, tissue damage can extend to the bone. Damage to tissues can also result from friction and/or shear when a person slumps in a chair, slips down a bed or during repositioning.

WHAT IS A SUPPORT SURFACE?

The term support surface applies to specialist beds, mattresses, overlays, to chair and wheelchair cushions, and to heel protectors. Support surfaces reduce the likelihood of a pressure ulcer developing by preventing build up of pressure on one area of tissue. This is known as pressure redistribution.

Support surfaces redistribute pressure either by allowing a patient’s body to sink into them — the weight and therefore pressure is spread over a larger area — or by intermittently removing pressure from certain areas of the body allowing tissues to recover before they bear pressure again.

WHEN SHOULD A SUPPORT SURFACE BE USED?

Anyone at risk, or suffering with an existing pressure ulcer, should be nursed on a support surface, and as a bare minimum on a high-density foam mattress. Support surfaces should be used in all situations: for example, when a patient is in bed, sitting in a chair or travelling in wheelchairs and vehicles. Patients are at greater risk when sitting, because pressure is focused on a smaller area. For this reason, support in the form of pressure reducing or redistributing cushions must be provided during transportation.

Types of support surface include:

- Specialist beds — for patients with a high BMI
- Mattresses (high specification foam, air filled, air fluidised and alternating pressure)
- Cushions — for patients at risk of pressure ulcers that sit in chairs or wheelchairs
- Overlays — useful for adding to one side of a bed to allow partners to continue sharing
- Heel protectors — for protecting the heel from shear and friction and preventing foot drop and rotation.

If you are using a support surface it is important to continue to encourage individuals to move regularly and to reposition patients at least every two hours.

ASSESSING AND DOCUMENTING

Daily reassessment of how well the support surface is working for a patient is vital, and equipment should be checked regularly to ensure it is working properly. Both activities must be documented so that others know what has or hasn’t been done. Likewise, people on support surfaces must be repositioned regularly in order that pressure is relieved frequently and this too must be noted.
How to support patients effectively

1. **Use a suitable support surface**
   a. Reassess daily.
   b. Understand how to use equipment – do not exceed weight limit.
   c. Check regularly to make sure the equipment is functioning correctly.

2. **Protect areas at risk of pressure damage (e.g. sacrum and heels)**
   a. Heels must always be floated.
   b. Keep skin clean and dry but well hydrated.

3. **Tell others what you are doing**
   a. Document turns/changes of position. These may be performed more frequently if skin remains red or becomes broken.

Continue to move patients frequently whatever the type of support surface used and make sure bedclothes and clothing are smooth under the patient when repositioning. Ensure the patient knows WHY they are being repositioned – they may do it for themselves.

Types of pressure redistribution support mattresses

**Layers of different densities of foam/viscoelastic foam**

**Higher specification foam**
For patients at risk of pressure ulcers (as a minimum)

**Air- or gel-filled**

**Air filled**
For low to moderate risk patients or for very heavy/rigid patients who are hard to reposition

Porous cover that allows air to pass out and fluids to pass through
Silicone beads suspended in air flow

**Air fluidised**
For patients with existing pressure ulcers who cannot be repositioned or who have pressure ulcers on one or more turning surfaces

**Alternating pressure**
Patients at high risk or with an existing pressure ulcer, e.g. those who are acutely ill/immobile or with a history of pressure ulcer
Do's and don'ts

Do

✓ Document support surface decisions, repositioning and skin condition
✓ Consider all surfaces used by patient, including wheelchairs and seats in vehicles
✓ Consider impact of mattresses on height of bed/chairs and side rails as these may impact on independence and patient safety
✓ Do regularly re-evaluate suitability of support surface
✓ Do reposition when using support surfaces (using handling aids where necessary).
✓ Do ensure bedclothes are smooth between patient and support surface, particularly after repositioning
✓ Do encourage self-repositioning as often as every 15 minutes
✓ Ensure mattress or overlay have not raised patient’s height in relation to bedrails
✓ Do monitor skin condition and patient hydration status

Do not

✗ Do not exceed weight limit of support surface
✗ Do not neglect heels — consider these separately
✗ Do not use fitted sheets with active support surfaces (those that can change pressure distribution without a patient on it and require power supply)
✗ Do not use active support surface for anyone with spinal injury or unstable fracture
✗ Do not use a support surface that hinders independent movement by patient
✗ Do not use beds and mattresses of incorrect length/size for patients
✗ Do not use products such as incontinence pads to manage skin moisture when foam support surfaces are in use
✗ Do not use pillows to extend the length of the mattress

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HOW TO USE SUPPORT SURFACES

CHALLENGES IN SELECTING A SUITABLE SUPPORT SURFACE

The range of support surfaces might be daunting and advice and help from those with specialist skills should be sought.

Things to consider are:

■ Patient weight and height
■ Physical condition — whether the person can reposition themselves, their overall health will determine whether they can sit or be transported
■ Condition of the skin — eg is it moist or dry. Foam mattresses can increase skin temperature and therefore moisture on the skin surface, which can cause skin breakdown
■ Impact on care procedures — some overlays on mattresses might raise the height meaning that safety rails no longer prevent falling, and the extra height might cause patients difficulty in getting in and out of bed
■ Patient comfort and choice — eg some support surfaces make a noise during use and can disrupt sleep
■ How often does the support surface need to be replaced?
■ How easy are they to clean/decontaminate? Some support surfaces need to be taken off site for cleaning and maintenance
■ Is the support surface fit for its space?

Support surfaces should be decided on as part of a comprehensive treatment/management strategy. The cost of support surfaces can be a challenge and approaching the right person will be vital. A patient’s need should be documented and acted on, even where funding is perceived to be limited.

HOW THIS GUIDE CAN BE USED TO PREVENT PRESSURE ULCERS

By choosing and using the correct support surface the incidence of tissue damage caused by pressure can be reduced. Failing to reposition patients on support surfaces will lead to tissue damage and discomfort.

Regular inspection of skin over bony prominences will allow early markers of pressure damage to be seen. If skin is reddened or does not blanch (go white) under light finger pressure, suspect pressure damage. Documenting assessment, support surface details and repositioning regimen will let others know what has been done and what to do next.

SSKIN Bundles

Keeping patients moving is just one step of a simple five-step care plan (called a SSKIN bundle) to ensure all patients receive the appropriate care to prevent pressure damage. This includes:

Using the Safety Cross

Using the pressure ulcer safety cross to measure incidents of pressure damage can help to raise awareness and change attitudes to pressure damage. Keep the safety cross in a public area so that everyone can see it on a regular basis. This will show how many patients have developed a pressure ulcer in the care home. It should be used to record all pressure ulcers, regardless of grade and should help to identify improvements in care and reduce the number of pressure ulcers occurring.

KEY POINTS

1. Support surfaces redistribute or relieve pressure that can damage tissue and cause pressure ulcers
2. Reposition patients even when support surfaces are used
3. Seek advice from those with specialist skills when choosing an appropriate support surface
4. Reassess patients regularly to ensure the appropriate support surfaces are being used.

KEY RESOURCES

■ How to select a support surface http://www.wounds-uk.com/how-to-guides/how-to-guide-selecting-a-support-surface
■ SSKIN bundle (http://www.stopthepressure.com/sskin/)
■ Safety cross (http://www.patientsafetyfirst.nhs.uk/ashx/Asset.ashx?path=/PressureUlcers/Pressure%20Ulcer%20Safety%20Cross.pdf)