Mid Essex Hospital Services NHS
NHS Trust

Guidelines for the Prevention & Management of Pressure Ulcers	**Clinical Guideline**

Developed in response to:	Delivery of evidence-based practice National Institute of Clinical Excellence (NICE) Best practice

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Clinical Guidelines ONLY

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GUIDELINES FOR THE PREVENTION & MANAGEMENT OF PRESSURE ULCERS

1. Introduction

1.1 A pressure ulcer is defined as an area of localised damage to the skin and underlying tissue caused by pressure, shear, friction and/or a combination of these.

1.2 Early identification and minimisation of risk factors together with early recognition of the signs of pressure damage, can reduce the risk of damage occurring if preventative measures are put in place.

2. Purpose

2.1 The guidelines aim to assist the inter-disciplinary team in the identification of patients at risk of developing pressure ulcers and those with existing skin damage.

2.2 It guides the healthcare professional in the identification and subsequent minimisation of risk factors and management of patients at risk and with pressure damage.

2.3 Wound management is excluded from this document. The MEHT dressing formulary guides staff in wound management

2.4 Strategies for the prevention and management of pressure ulcers are primarily concerned with the identification, elimination or minimisation of risk factors; with optimising skin condition and with manipulation of the local environment.

2.5 They have been prepared in response to the National Institute for Clinical Excellence (NICE) clinical guidelines for ‘Pressure ulcer risk assessment and prevention’ and follow a similar format.

2.6 The guidelines will be reviewed every two years by the Tissue Viability Service. Where there is new or changed authoritative guidance and / or changes to organisational structures the guidelines will be reviewed more frequently.

3. Staff and Training

3.1 Risk assessment should only be undertaken by nurses who are trained and deemed competent in pressure ulcer risk assessment.

3.2 Completion of the Trust’s pressure ulcer prevention and management study day, external tissue viability training i.e. the tissue viability course, ward-based training by the Tissue Viability Service, appropriate distance learning courses and completion of NVQ level 3 unit HSC358 all constitute appropriate training.

3.3 Audit of staff competence will form part of the tissue viability audit programme

3.4 The Tissue Viability education programme includes study days on pressure ulcer prevention and management.

3.5 All nurses undertaking risk assessment and skin assessment must have undergone training in this either in a formal education setting or through the provision of local training sessions.

3.6 All wards are expected to identify a tissue viability link nurse to act as a local tissue

viability resource. Link nurses will have received specific training and will assist in the dissemination of information and the raising of standards of care within their ward.

3.7 Each of the four divisions will also have an identified lead link nurse who will act as an extra resource for their locality.

3.8 Inter-disciplinary groups requiring training in pressure ulcer prevention and management can approach the tissue viability clinical nurse specialist for training to meet their specific needs

4. Identification of Risk

4.1 The Waterlow Risk assessment tool (appendix 1) has been adopted by MEHT forms part of a holistic assessment of the patient.

4.2 All known pressure ulcer risk factors for an individual patient should be identified and their numerical weighting totalled to give an indication of level of risk.

4.3 It is not designed to be prescriptive but aid clinical judgement, which takes precedence over the tool alone.

4.4 Document any discrepancy between clinical judgement and Waterlow score in the nursing records.

4.5 Certain clinical areas, such as midwifery, paediatrics, burns and ITU may identify additional risk factors that need to be seen in conjunction with or in place of the Waterlow score. This will be in agreement with the clinical area and the tissue viability clinical nurse specialist.

5. Timing and frequency of risk assessment

5.1 Initial risk assessment must be performed within six hours of admission on <u>all</u> patients admitted to the Trust.

5.2 Subsequent reassessment should be done following a change in patient's condition, pre, post and intra-operatively, prior to and following any transfer or, if the patients' condition remains unchanged, weekly.

6. Documentation of Risk Assessment

6.1 Completed Waterlow risk assessment should be documented in the nursing notes which should be made accessible to the inter-disciplinary team.

7. Skin assessment Process

7.1 An initial and ongoing assessment should include a detailed assessment of the patient's skin especially over vulnerable areas.

7.2 The Trust has adopted the European Pressure Ulcer Advisory Panel (EUPAP) classification tool for determining grade of pressure ulcer damage (see skin assessment & repositioning schedule, Appendix 2).

7.3 The classification tool allows for early detection of skin changes and should alert the healthcare professional the eliminate or minimise risk factors where able

7.4 Skin assessment can be carried out by any healthcare professional with knowledge of changes in the patient's skin (see skin assessment & repositioning schedule, (Appendix 2). It is the responsibility of the qualified nurse to determine and document the frequency of planned repositioning and management strategies based on the patient's skin response.

7.5 High-risk patients and their carers, who are willing and able, should be encouraged to undertake ongoing inspection of their own skin in conjunction with the inter-disciplinary team.

7.6 Blanching hyperaemia (a reddened area of skin, corresponding to local pressure that blanches under digital pressure then reddens again) should be identified and documented. This should be seen as a precursor to pressure damage if no remedial action is taken and should alert the healthcare professional to increase the frequency of repositioning.

7.7 Subtle changes in skin colour may be difficult to assess in darkly pigmented skin and the additional signs should be identified in the assessment of early skin changes for these patients (appendix 3).

8. Frequency of Skin Inspection

8.1 Regular skin inspections should be undertaken on all patients at risk of developing pressure ulcers and those with existing damage.

8.2 The frequency of inspection is determined on an individual patient basis by a registered nurse, in response to the patient's generalised condition and their tissue response to pressure. It should be documented on the skin assessment & repositioning schedule (appendix 2).

8.3 Alternating mattress can reduce the need to reposition the patient as frequently, as it relieves pressure on vulnerable areas, it does not negate the need for repositioning totally.

8.4 Some alternating mattresses can produce redness on the skin corresponding to the mattress cells. This redness should be tested to ensure it blanches on light digital pressure. This should be noted but does not constitute skin damage as it is the normal hyperaemic response to temporary vascular occlusion to the tissues.

9. Skin care

9.1 External skin moisture, from sweating and urinary incontinence, and the effect of faeces are associated with a reduced ability to withstand external forces should be addressed by good hygiene principles and barrier techniques.

9.2 Non-soap cleansers, barrier film spray and faecal management systems should be considered in patients where moisture and faecal matter frequently come in contact with the skin or where there is evidence of skin maceration or excoriation

9.3 Dry skin can leave small cracks and fissures in the skin rendering it more susceptible to external forces. Regular application of simple moisturisers and emollients can maintain the optimal skin environment.

9.4 The use of talcum powder should be avoided as this has a drying effect on the skin and can result in encrustation in skin creases.

9.5 The use of some barrier creams are contraindicated with use of incontinence pads as they reduce the transfer of fluids away from the skin in to the pad. Staff should check manufacturer's guidance on this.

10. Positioning and repositioning patients

10.1 Pressure, sheer and friction are major factors associated with pressure ulcer development. Minimisation of these factors are used in prevention strategies. Patient positioning, repositioning techniques and pressure relief can influence the magnitude and duration of these forces on the skin.

10.2 Physically repositioning the patient (following manual handling guidelines) or using electrical profiling beds changes the area of load from one area to an alternative area of the body.

10.3 Static pressure relieving mattresses and alternating mattresses reduce pressure on the skin. They can reduce the frequency of position changes but do not negate the need entirely

10.4 The seated patient is at higher risk due to the intensity of pressure over a small body area. Static foam or gel pressure relieving cushions should be used in any patient at risk, or patient with pressure damage seated in a chair for a prolonged period of time. It may also be necessary to limit the length of time a patient sits out, if clinical condition allows, to less than two hours in a vulnerable patient.

10.5 Patients who require their legs being elevated on a footstool are at high risk of heel pressure damage, especially if they have any vascular insufficiency. Footstools must be placed so as to leave heels free of pressure.

10.6 Patients with anti-embolism stocking must have them removed periodically to allow skin inspection. They should not be used on patients with known significant arterial insufficiency.

10.7 The frequency of repositioning is individual to the patients' needs and tissue tolerance. It is determined following a holistic assessment and ongoing inspection of vulnerable areas. It is paramount that the entire nursing team are aware of the planned repositioning for the patient and that any interventions are documented (appendix 2).

11. Equipment provision and management

11.1 Static foam mattresses and cushions with built in pressure relieving properties are the minimum level of pressure relief for at risk patients. These mattresses are held and managed at ward level.

11.2 All foam mattresses require cleaning after each patient episode in accordance with the Infection control policy *Decontamination of Environment and Equipment Version 1.0*

11.3 Some foam mattresses require regular turning to increase longevity. This should be done at the end of each patient episode. Instruction for turning, if required, is printed on the mattress.

11.4 Foam mattresses must undergo an annual audit to determine the condition of the foam and cover (Appendix 4).

11.5 Condemned mattresses must be removed from use, as soon as a replacement has been delivered. It should be marked with a letter 'C' and dated. The portering staff must be advised to provide a new mattress and remove the condemned mattress, which should be segregated for disposal.

11.6 Alternating mattresses overlays and mattress replacements are provided through the medical equipment library (MEL) for patients at greater risk of pressure ulcer development or those who require healing of an existing pressure ulcer (appendix 5).

11.7 Alternating mattresses are provided for single patient use only and must be decontaminated in accordance with the Infection control policy *Decontamination of Environment and Equipment Version 1.0* and returned to the MEL. Compliance to this standard will be audited as part of the tissue viability audit programme

11.8 The choice of mattress is determined by the patients' mobility, the level of risk as determined by the Waterlow risk assessment and the extent of pressure damage present. The MEHT pressure relieving mattress and cushion selection criteria and flowchart guides the nurse in the decision making process (Appendix 5)

11.9 Specialised mattresses and beds for specific clinical needs e.g. to assist respiratory function are frequently used in critical care and burns. The selection criteria includes guidance on their use (appendix 5)

11.10 The process for obtaining and returning alternating mattresses (appendix 6) should be adhered to at all time to ensure optimum utilisation of trust-owned equipment.

12. Organisational monitoring of pressure ulcers

12.1 The National Institute for Clinical Excellence (NICE) clinical guidelines for 'Pressure ulcer risk assessment and prevention' recommend all hospital acquired pressure ulcers grade two and above constitute a clinical incident. A Datex form must be submitted to the risk department.

12.2 These patients must have a wound assessment undertaken, including an objective record of the extent of damage e.g. wound mapping and/or medical photography.

12.3 As hospital acquired pressure ulcers are seen a key quality indicator, it essential to quantify the extent in the Trust and to investigate root cause.

12.4 A register of all patients admitted with pressure damage or developing damage whilst in the Trust is maintained by the Tissue Viability Service.

12.5 All wards, with the exception of those designated as 'low incidence' areas, are required to complete a weekly pressure ulcer register (available on intranet). Completed forms need to be sent promptly to the Tissue Viability Office in order to maintain accurate records.

12.6 Areas designated as 'low incidence areas' only complete a form (available on Intranet) when a patient is admitted with, or develops pressure damage. Areas such as paediatrics, maternity and ENT are examples of 'low incidence' areas. The designation of an area as one of 'low incidence' is determined by the tissue viability clinical nurse specialist and is continually under review. It may be changed at any time if the incidence increases.

12.7 A quarterly pressure ulcer Incidence report is presented to the Governance Committee and disseminated to individual wards via divisional Deputy Directors of Nursing

13 References

EUPAP (2003) European Pressure Ulcer Advisory Panel www.epuap.org.uk

Kaltenhaler E, Whitfield MD, Walters SJ, et al UK, USA and Canada: 'How do pressure ulcer prevalence and incidence compare?' Journal of ~Wound Care 2001(10) 530-535

Bennett et al (2004) 'The cost of pressure ulcers in the UK'. Age and Aging, 33,pp.230-235

National Institute for Clinical Excellence (NICE) (2005) Clinical Guideline 29. 'The prevention and treatment of pressure ulcers'

Waterlow J, Pressure ulcer prevention Manual (revised 2005)

Appendix 1

WATERLOW PRESSURE ULCER RISK ASSESSMENT TOOL

Ring scores in table, add total. More than 1 score / category can be used

Build/weight for height		**Skin type Visual risk areas**		**Sex Age**		**Malnutrition screening tool (MST)**	
Average BMI 20 – 24.9	0	Healthy	0	Male	1	**A** Has patient lost weight recently? Yes = go to B No = go to C Unsure = go to C & score 2	**B** Weight loss score 0.5-5kg = 1 5 – 10kg = 2 10 – 15kg = 3 > 15kg = 4 Unsure = 2
		Tissue paper	1	Female	2		
Above average BMI 25 – 29.9	1	Dry	1	14 – 49	1		
Obese BMI >30	2	Oedematous	1	50 – 64	2		
		Clammy, pyrexia	1	65 – 74	3		
Below average BMI < 20	3	Discoloured Grade 1	2	75 – 80	4	**C** Patient eating poorly or lack of appetite? No = 0 Yes = 1	Nutrition score If > 2 refer for nutrition assessment / intervention
BMI=Wt(Kg)/Ht (m)^2		Broken / spots Grade 2-4	3	80+	5		

Continence		**Mobility**		**Special Risks**			
Complete / catheterised	0	Fully	0	**Tissue malnutrition**		**Neurological deficit**	
Urine incontinence	1	Restless / Fidgety	1	Terminal cachexia	8	Diabetes, MS, CVA	4-6
Faecal incontinence	2	Apathetic	2	Multiple organ failure	8	Motor / sensory	4-6
Urinary + faecal incontinence	3	Restricted	3	Single organ failure (Resp, renal, cardiac)	5	Paraplegia (max of 6)	4-6
		Bed bound e.g. traction	4	Peripheral Vascular disease	5	**Major surgery / trauma -** Score can be discontinued after 24 hours if normal recovery	
		Chair bound e.g. wheelchair	5	Anaemia (Hb <8)	2	Orthopaedic/spinal	5
				Smoking	1	On table > 2 hours	5
						On table > 6 hours	8
				Medication – cytotoxic, long term / high dose steroids, anti-inflammatory - Score max of 6			

Score 10+ - At Risk	**Score 15+ - High Risk**	**Score 20+ - Very High Risk**

Appendix 2

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Affix patient identification label

Hospital Number _____

Surname _____

First name _____

Skin Assessment and Repositioning Schedule

Date	Time *24 hour clock*	Patient position *Use code Key A*	Skin assessment *Use code Key B*	*Area of skin damage Use code Key C*	Equipment in use *Use code Key D*	Planned position change (hours)	*Comments*	Signature

Skin Assessment and Repositioning Schedule

Notes for completing the patient repositioning schedule (overleaf):

- Complete form on **all** patients with a Waterlow score greater than 10
- Keep the form in the patient's records
- The form can be completed by any of the multidisciplinary team or relatives when repositioning has taken place
- Frequency of repositioning should be determined by skin inspection & in negotiation with the patient
- When planned repositioning is omitted, a rationale must be made in the comments box
- Patients on pressure relieving mattresses still require repositioning (unless contraindicated)
- The form must be filed in the nursing records when completed / on discharge
- Identify the planned position change in hours e.g. hourly, two hourly etc

Key A State the position the patient is being place		**Key B**		**Key C** Indicate all appropriate codes		**Key D**	
Patient position	**Code**	**Skin assessment G1 – G4 EUPAP classification**	**Code**	**Area of damage**	**Code**	**Equipment in use**	**Code**
Left lateral	LL	Intact Only if all areas are intact	I	Heel(s)	H	Level 1 Static pressure reducing mattress	L1
Right lateral	RL	blanching hyperaemia Red, blanching, intact skin	BH	Sacrum	S	Level 1 + Static pressure reducing mattress plus Static pressure relieving cushion	L1+
Fully recumbent	R			Trochanter(s)	T		
Semi-recumbent	SR	Grade 1 Red, non-blanching, intact skin	G1	Ischial region(s)	I	Level 2 Alternating mattress overlay e.g. Viaclin	L2
Profiled – profiling bed frame	P			Buttock(s)	B		
Prone	PN	Grade 2 Epidermal damage or blister	G2	Elbow(s)	E	Level 3 Alternating mattress replacement e.g. Trinova, Cairewave	L3
Seated	S			Occiput	O		
Stood / walked	SW	Grade 3 Dermal & subcutaneous damage	G3	Right side	R	Specialised beds (specify type) ITU & Burns patients. If rented in refer to tissue viability CNS for authorisation	SB
Self positioning	SP			Left side	L		
Other (specify in comment box)	O	Grade 4 Full thickness damage	G4	Other (specify)	O	Other – include gel pads, foot protectors etc(specify)	O

Appendix 3

Assessing superficial pressure damage in patients with darkly pigmented skin

1. Blanching and non-blanching erythema may be difficult to assess in patients with darkly Pigmented skin.

2. In the absence of these, other techniques must be utilised to assess early tissue damage.

3. **Local pain**

   Pain and soreness over bony prominences should alert the nurse that pressure may be causing damage to the underlying skin structures.

4. **Past history of pressure damage**

   Due to reduced tensile strength of the tissues over bony prominence from previous pressure damage increases the risk of recurrence

5. **High Waterlow score**

   A high Waterlow score should alert the nurse to potential pressure damage in patients where visible signs may be difficult to ascertain

6. **Purple / blue / aubergine colouration to the skin**

   In darkly pigmented skin instead of the reddening, a purple, blue or deep aubergine colouration may be evident. The presenting colour will depend on the skin tones of the patient

7. **Changes in local skin temperature**

   Local skin heat may be felt when tissue damage results in an inflammatory response. Conversely cooling of the skin may be felt as devitalisation of tissue occurs

8. **Oedema with taut, shiny skin**

   Local tissue inflammation and cellulitus may result in oedema which is represented by taught and shiny skin

9. Induration

Loss of skin texture caused by deep tissue damage in the presence of intact skin can cause a boggy feeling to the skin texture. This should alert the nurse to significant damage despite outward appearance of intact skin

Appendix 4

Mid Essex Hospital Services NHS
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Process for undertaking annual foam mattress audit

General Considerations

- Pressure relieving foam mattresses are made from either polyurethane foam or visco-elastic foam that increases the surface area of the mattress in contact with the patient, thereby relieving pressure.

- The mattress cover is multi-stretch and vapour permeable to reduce sheer and friction forces, as well as reducing the build up of moisture in the mattress core and at the interface between patient and mattress.

- An annual mattress audit is required to ensure the mattress is fit for purpose as foam fatigue and cover damage can increase the risk of pressure damage and infection.

- The audit looks at 'bottoming out' (lack of support provided due to foam fatigue), mattress cover integrity and ingress of fluid in to the mattress core

- The following guidance details the process required and action needed in the case of a mattress failing to meet the standard.

- It includes the relevant audit tool required to undertake the process

Process

- The mattress audit should be undertaken on an annual basis on a given day (or couple of days) to reduce errors caused by the moving of beds to different wards

- Access to the mattress must be possible to fully assess its condition.

- Where the patient is unable to be moved the mattress should be identified by writing in indelible ink on the bottom right hand corner of the mattress the date and 'not audited'. When able the mattress should then be audited.

- Where a mattress meets the standard and is deemed fit for purpose, the date and the letter 'P' (meaning passes audit) should be written in indelible ink on the bottom right hand corner of the mattress.

- If a mattress shows early signs of foam fatigue but does not 'bottom out' the date and the letter 'B' (for borderline) should be written in indelible ink on the bottom right hand corner of the mattress.

- Where a mattress fails to meet the standard and is deemed condemned, the date and the letter 'C' should be written in indelible ink on the bottom right hand corner of the mattress.

- If only part of the mattress fails to meet the standard e.g. foam or cover the part failing should be identified as ‘C’ and the part which meets the standard should identified as ‘P’, so only the defective part need be removed from use.

Mattress audit protocol

Cover

- The cover and the zip must be intact
- There must be no evidence of excessive staining or indentation on the cover

Mattress

- The mattress must be at least 130cm (5”) in depth and have no obvious damage
- The mattress passes the ‘bottom out’ test.
    - ❖ Using interlocking fingers make a fist
    - ❖ With arms straight and working from the foot of the mattress to the head (along the mid-line) at 30cm intervals apply body weight to cause indentation in the mattress. If the bed base is felt through the mattress at any point the mattress will have failed the test and should be marked as condemned
    - ❖ If the mid-line is satisfactory test the sides of the mattress at mid-point
- Open the zip of the cover and inspect the foam for evidence of contamination and malodour. Test for dampness using a paper towel.
- Look at the inner side of the cover. Staining and small puncture holes are easily seen and may correspond to staining of the foam.
- Foams do discolour over time, turning yellow but this would show as a wide distribution rather than isolated areas as caused by ingress of bodily fluids
- Any old type ‘pink marbled’ mattresses are no longer recommended and should be condemned, regardless of condition

Action on identifying a condemned mattress

- The Trust-wide annual audit will act as a precursor for replacement of condemned mattresses with new ones
- Condemned mattress must be removed as soon as a replacement is available as they pose a risk in the development of pressure ulcers and infection.
- The porters should be alerted to replace a condemned mattress with a new one.
- If no new mattresses are available the ward need to raise the issue with the tissue viability nurse or their Deputy Director of Nursing.

- A datex form should be completed if any patient has to be nursed on a condemned mattress due to no new ones being available

FOAM MATTRESS AUDIT

HOSPITAL		WARD		AUDITED BY	

AUDIT CRITERIA	1	2	3	4	5	6	7	8	9	10	Total
Is the mattress cover intact? If no, condemn & change cover											
Is there staining to the mattress cover? If significant staining, condemn & change cover only											
Is the mattress at least 130cm (5”) deep? If no, and there is no ‘bottoming out’ mark as borderline											
Is the fist test satisfactory? If yes mark as ‘P’											
Is the fist test borderline? If yes mark as ‘B’											
Is the mattress ‘bottomed out’? If yes mark as ‘C’ and arrange replacement											
Is the internal mattress stained? If yes mark as ‘C’ and arrange replacement											
Is the internal mattress malodorous? If yes identify cause, if it poses significant risk, mark as ‘C’, if not consider borderline & reaudit											

USE ADDITIONAL AUDIT FORMS AS NECESSARY **Answer ✓ = Yes** **X = No** **N/A = No access to mattress**

Appendix 5

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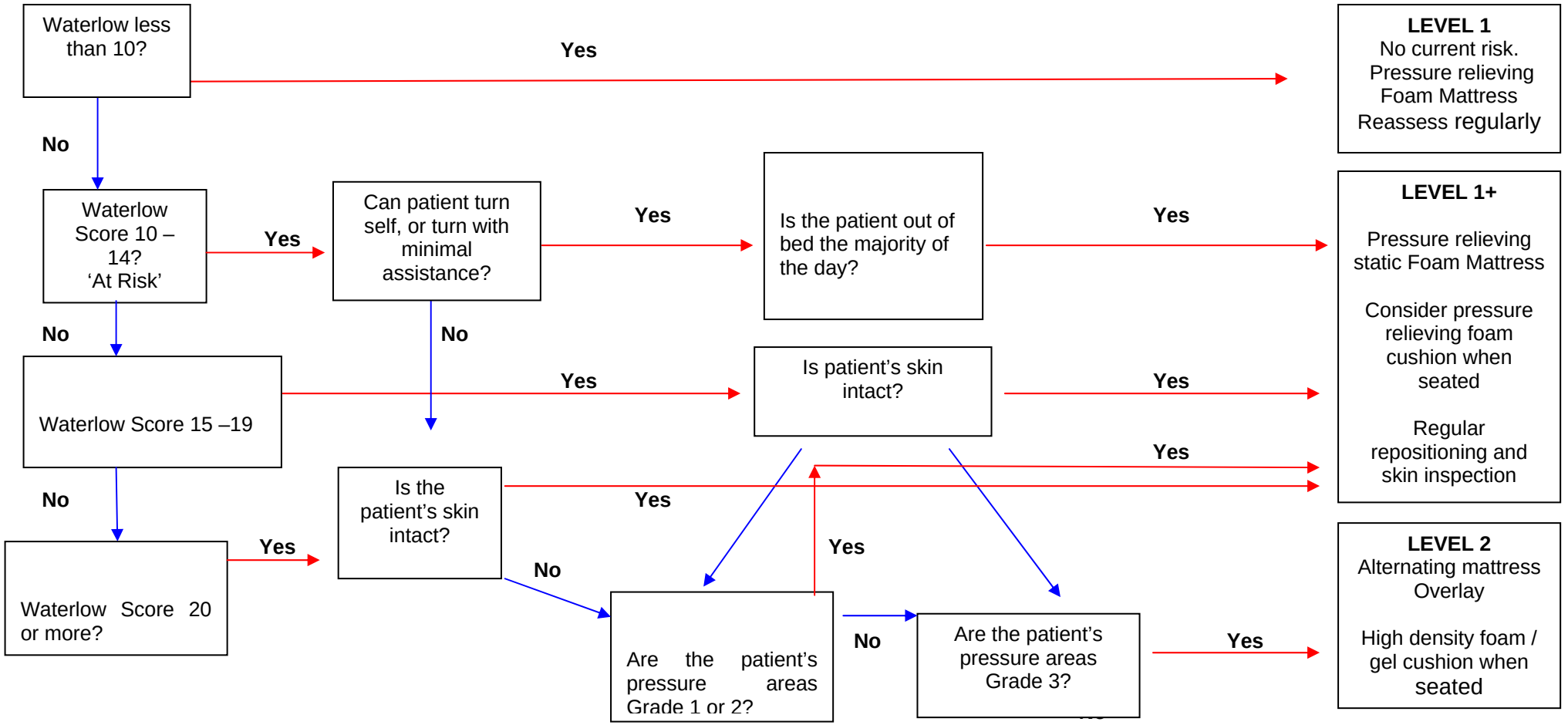
MATTRESS & CUSHION SELECTION FLOW CHART



Things to consider during the assessment process

- Clinical judgement & patient's wishes need to be considered
- Consider stepping up or down the level of equipment as the patient's condition changes or if they fall in to either end of the weight spectrum
- Is alternating therapy contraindicated? (see clinical guidelines)
- For patients with additional medical needs refer to special bed criteria
- All patients with pressure damage must be registered on the weekly report form

Appendix 5

Mid Essex Hospital Services NHS
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PRESSURE RELIEVING MATTRESS & CUSHION SELECTION

Select the level of equipment based on the 'best fit' descriptions in all three areas of mobility, risk and tissue damage

	PATIENT MOBILITY	RISK CATEGORY	GRADE OF TISSUE DAMAGE	MATTRESS (Obtain foam mattresses via porters alternating mattresses via medical equipment library)	SEATING (wards to provide cushions)
Level 1	**In Bed**: Fully mobile **When Seated:** Fully mobile	Waterlow less than 10	No tissue damage.	Pressure relieving high density foam mattress Equipment available: MSS Softform Premier Mattress	Ordinary ward chairs
Level 1+	**In Bed:** Able to turn and move independently or with minimal assistance in bed. **When seated:** Restricted mobility out of bed, but can mobilise independently/or with aids.	Waterlow 10 - 20	No damage OR Grade 1 or 2 Tissue Damage	Pressure relieving high density foam mattress Equipment available: MSS Softform Premier Mattress	Pressure relieving foam cushion
Level 2	**In Bed:** Restricted ability to move in bed, some assisted repositioning required. Spends the majority of time in bed **When seated:** Requires assistance to reposition. Sits out for > 2 hours	Waterlow 15- 20+	Grade 3 pressure damage or Grade 4 pressure damage in a patient with a low body mass index	Alternating mattress overlay (position on top of ordinary mattress) Equipment available Pegasus Viaclin	High density foam or gel pressure relieving cushions Consider limiting the time seated out to a maximum of 2 hours
Level 3	**In Bed:** Minimal ability to move in bed, Assisted repositioning required on most occasions **When seated:** Needs assisted repositioning / hoisting when seated or due to condition prefers to sleep in the chair	Waterlow score 20+	Grade 4 pressure damage or grade 3 pressure damage in a patient with a high body mass index (see clinical guidelines)	Alternating mattress replacement (position directly on bed frame) Equipment available: Pegasus Biwave Carer Pegasus Trinova Pegasus Airwave Pegasus Cairwave	High density foam or gel pressure relieving cushions Limit time seated out to a maximum of 2 hours or profile electric bed frame in to a cardiac chair position

- Mattresses supplied by the medical equipment library (MEL) are for single patient use only
- After use, decontaminate (according to infection control policy) and contact MEL for collection
- Requests for equipment and collections should be made to MEL on pagers #6500 229 or #6500 241
- Out of hours requests for equipment are made via the porters
- If no in-house mattresses are available refer to rental mattress protocol

SPECIAL BEDS AND THERAPY DELIVERY SYSTEMS

BED TYPE	THERAPY AIMS	INDICATIONS	CONSIDERATIONS
• Hill Rom TotalCare Sport • KCI Triadyne	• Pulmonary therapy Lateral rotation Pulsation Percussion Vibration • Pressure relief	• Ventilated patient at risk of sepsis / pneumonia / ARDS • Difficult mobilisation of secretions • FiO2 is > 50% • PF ration is <40KPa (400 mmHg) • Patient desaturates • Haemodynamically unstable on moving • Patient immobile & presents moving & handling risk • Prone positioning required • Presence of multiple venous & arterial lines • Skin reddens & marks easily due to poor perfusion • Use of therapeutic inotropes or other vaso-constrictors • Frequent weighing required • Chair positioning required	Contraindications: Unstable cervical, thoracic and / or lumber fracture Cervical or skeletal traction
• Hill Rom TotalCare Duo 2 System	• Advanced wound therapy in patients with friable / damaged skin • Pressure relief	• Burns – All thickness • Recent grafting • Patient immobile & presents moving & handling risk • Skin reddens & marks easily due to poor perfusion • Frequent weighing required • Chair positioning required	Contraindications: Unstable fractures when used in alternating mode
• Egerton Spinal bed frame	• Unstable spinal injury management	• Unstable spinal fractures	
• Hill Rom Clinitron AF	• Containment of heavy fluid loss • Thermo-regulation • Air fluidised pressure relief	• Skin conditions resulting in high levels of fluid loss, including burns • Extreme levels of pain • Thermo-regulation • Major wounds	Contraindications: Unstable cervical, thoracic and / or lumber fracture Cervical or skeletal traction

Please note, bariatric equipment is not included on this criteria – please see manual handling policy, appendix 4

Appendix 6

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PROCESS FOR OBTAINING ALTERNATING PRESSURE RELIEVING MATTRESSES

General Considerations

- Alternating pressure relieving mattresses are provided by the medical equipment library on a single patient basis and must be returned there immediately after the patient episode
- A holistic assessment including the identification of pressure ulcer risk factors, patient mobility and skin condition is needed before a clinical decision can be made as to the type of mattress required.
- The Mid Essex Hospital's *pressure relieving mattress and cushion selection criteria* guides the nurse through the decision making process and takes in to consideration the Waterlow score, the patient's mobility and the skin condition – including grade of any pressure ulcers.
- Additional consideration should be taken in regards of patients at either end of the weight spectrum.
- Pressure relieving seating is essential for patients at risk sitting out for prolonged periods. Provision is the responsibility of the ward manager.

Process

When a decision has been made as to the type of mattress required, according to Mid Essex Hospital's *pressure relieving mattress and cushion selection criteria* the nurse should bleep the medical equipment library to make their request.
The following information will be required:

- Ward
- Hospital Number
- Patient's surname then first name
- Type of equipment required
- The patients Waterlow score
- The state of the skin (including grade of existing damage)
- Name of person making the request

An entry should be made in the patient's records of the date, time and type of mattress requested.

During the period before the equipment is delivered pressure relief must be maintained through regular repositioning (unless contraindicated) and the skin inspected for any changes. This should be documented in the patient's records.

The medical equipment staff will, on receiving the information either provide the mattress **or** inform the ward of any anticipated delay in being able to provide one.
On delivery of a mattress the date and time and type of mattress provided should be documented in the patient's records

If there is an anticipated delay in sourcing a mattress the ward staff should document this in the patient's records, continue to reposition and inspect the skin and make a clinical decision as to if renting a pressure relieving mattress is required in light of the anticipated length of delay.

Returning a Trust Owned alternating Mattress to the Medical Equipment Library
Before deflating the mattress it must be cleaned according to the decontamination of equipment and environment guidelines[1]

When deflated, both parts (mattress & pump) must be bagged, in the clear bag provided, and a decontamination notice completed

The mattress should be stored awaiting collection in a designated area

Medical equipment library should be informed immediately after this process has taken place to ensure maximum utilisation of equipment

How to Obtain a Rental Pressure Relieving Mattress
In the unlikely event of a rental mattress being required the ward staff should contact the following
Monday to Thursday office hours
Tissue viability clinical nurse specialist by pager via switchboard.

If no there is no response from the tissue viability CNS within 30 minutes ward staff should contact the Matron for their division for authorisation

Friday office hours
Ward staff should contact the Matron for their division for authorisation

Out of hours and at weekends
The site coordinator must be contacted for authorisation

Clinical information will be required before agreement to rental will be given. Failure to be able to provide this information may delay getting a rental mattress.

The preferred company for pressure relieving mattresses is Pegasus Limited.
Only approved products are available for rental. These are:

- Pegasus Viaclin – alternating mattress overlay
- Pegasus Trinova – alternating mattress replacement
- Pegasus Cairwave – alternating mattress replacement

Once a rental has been authorised the company should be contacted with the request details.

A reference number will be given, which should be documented in the patient's records.

A message should be left on the tissue viability voicemail with the final details of ward, patient, mattress and rental number.

Process for calling off a rental mattress
The mattress must be socially cleaned and put in the clear plastic bag provided with the mattress.

A decontamination notice must be completed

Medical equipment library should be notified who will remove the equipment and contact the manufacturer to call off the rental
Medical equipment library will notify tissue viability of the call-off

Contacts	**Number**
Medical Equipment Library	Bleep: #6500 0241 #6500 0229
Pegasus Limited	02392 784200