

FOI REF: 25/207

2<sup>nd</sup> May 2025

**Eastbourne District General Hospital** 

Kings Drive Eastbourne East Sussex BN21 2UD

Tel: 0300 131 4500 Website: www.esht.nhs.uk

#### FREEDOM OF INFORMATION ACT

I am responding to your request for information under the Freedom of Information Act.

The answers to your specific questions are detailed within the attached document – '25-207 - FOI Questions - Wound Care'.

Please note the following:

#### Section 17 Notice of Refusal – Sections 40(2) and 43(2) applied, please see below:

Please note that it is the Trust's FOI policy to only provide the names of staff that are grade 8a or above, therefore staff that are below that grade have been redacted from the attached policies.

Please note that we have also redacted the names of staff that no longer work within the Trust, within the policies.

I can confirm that we hold this information, but it is exempt under section 40(2) of the Freedom of Information Act 2000 – Personal Information of third parties. This is because disclosure of this information would breach the principles of the Data Protection Act.

This is an absolute exemption and there is, therefore, no requirement to consider the public interest.

Whilst the Trust holds the information requested, in respect of the price paid per unit for VAC/NPD, it is applying a Section 43(2) exemption in relation to this part of the request as the release of the information is likely to prejudice its commercial interests.

In applying the exemption consideration has been given to the public interest in enabling scrutiny of public sector decision making and the general public interest in accountability and transparency.

We have concluded that sharing commercials could disadvantage the incumbent supplier against their competitors. The information could provide competitors with the suppliers pricing, which could result in these suppliers obtaining a competitive advantage which could result in the Trust not obtaining best value for money.

In this instance, we consider that the public interest in withholding the information is greater than the public interest in disclosing the information.

If I can be of any further assistance, please do not hesitate to contact me.

Should you be dissatisfied with the Trust's response to your request, you have the right to request an internal review. Please write to the Freedom of Information Department (<u>eshtr.foi@nhs.net</u>), quoting the above reference, within 40 working days. The Trust is not obliged to accept an internal review after this date.

Should you still be dissatisfied with your FOI request, you have the right of complaint to the Information Commissioner at the following address:

The Information Commissioner's Office Wycliffe House Water Lane Wilmslow Cheshire SK9 5AF

Telephone: 0303 123 1113

Yours sincerely

Freedom of Information Department esh-tr.foi@nhs.net

## FOI Questions

Please complete all sections (1-5).

Each section is on a separate page to aid in completion by different departments if needed.

Trust Name: East Sussex Healthcare NHS Trust		
1. Trust data		
Does the trust have a wound care clinic?	Yes⊠	No□
If yes, which hospital/s in the trust are these located at?		<u> </u>
The Trust have several clinics with 'Wound Care' in the session may be provided in clinics without 'Wound Care' in the session  These are located at Eastbourne District General Hospital and Care'	description.	be noted that wound care
Are these clinic specific clinics?	Yes⊠	No□
If yes, please list. e.g., Diabetic Foot Ulcer (DFU), Burns, acute s	urgical wounds etc.	
Diabetic foot		
Vascular nurse clinic		
Fracture clinic dressing clinic		
Dermatology		
07		

How many patients are seen for wound care p.a?

Clarification was sought asking you to clarify what is needed for the number of procedures, i.e. is this just the primary procedure or all procedures (this will include definitions of LH and RH, etc.); is this in an acute setting only or to include outpatients; is this just for Eastbourne District General Hospital and Conquest Hospital and confirmation was received that you require the following:

If this information is available, it would be all procedures that the trust has done in the last 12 months (2023/24). It would be for hospitals that come under the 'trust' (assuming this would be both hospitals. If this information is not available, please leave this question blank.

#### **Attenders to Wound Care Clinics**

Site	Specialty Name	New	Follow- Ups	Grand Total
CONQ	Ear, Nose & Throat	0	31	31
	Vascular Surgery	161	1508	1669
<b>CONQ Total</b>		161	1539	1700
EDGH	Ear, Nose & Throat	0	64	64
	Maxillo-Facial Surgery	0	419	419
	Trauma & Orthopaedics	28	3760	3788
	Vascular Surgery	153	2133	2286
<b>EDGH Total</b>		181	6376	6557
Conquest & EDGH	Dressing Clinics - F2F and Telephone	-	-	219
<b>Total Dressing List</b>		-	-	219
<b>Grand Total</b>		342	7915	8476

How many surgeries does the trust perform p.a?

Site	Primary Procedure	Secondary Procedures	Grand Total
CONQ	58161	105223	163384
EDGH	55946	97160	153106
Grand Total	114107	202383	316490

N.B. This will include procedures where the LH and RH are counted separately.

What are your surgical infection rates p.a?

Data is collected on all patients who have surgery in the following categories and includes post discharge surveillance.

Total knee replacements for period Oct-Dec 2024 0.9%. last 4 periods that surveillance took place 0.5 % Total hip replacements Oct-Dec 2024 0.9%. last 4 periods 1.2% Repair of neck of femur Oct-Dec 2024 0.7% last 2 periods 1.4%.

Have you completed a recent wound care audit?	Yes⊠	No□
If yes, please supply the date.		
August 2024 to March 2025.		
Could this please be attached? Please see the attached document – 'CQUIN Q4 Lower Limb Audit Trend	l Report'.	
Alternatively, please direct to where this can be found?		
Not applicable.		

Yes□

No⊠

If yes, could this please be attached

Information regarding wound care is available on the Trust website via the following link:

Patient information leaflets – East Sussex Healthcare NHS Trust

Alternatively, please direct to where this can be found?

Are your wound care pathways publicly available?

Please see the attached East Sussex Healthcare NHS Trust's policies – '00222\_04\_P\_Redacted'; '00401\_03\_P\_Redacted'; '01108\_P\_Redacted'; '01332\_P\_Redacted'; '01872\_P\_Redacted'; '02285\_P\_Redacted'.

#### 2. Health Care Professionals

Clarification was sought asking you to confirm if you require FTE number on bank/agency shifts filled within the areas specified over the last 12 months and confirmation was received that you require the following:

Yes please, all staff that have worked at the trust in the 12-month period.

Wound care HCP	Number Permanently Employed	Salary Band	How many temp/locum district nurses, TVN or HCA's have been employed over the last 12 months.
How many district	31.98 WTE	Band 6	2.61 WTE
nurses are employed		Band 7	
in the trust?			
How many Tissue	3.0 WTE	Band 6	0
Viability Nurse	2.0 WTE	Band 7	
(TVN) are employed			
by the trust?			
How many	43.2 WTE	Band 3	1.39 WTE
community facing	NB includes nursing	Band 4	
Health Care	associates		
Assistants (HCA) are			
employed by the			
trust?			

#### 3. Wound Care Products List

The attached list contains the most relevant products, we do not anticipate all these being used in your trust, please fill in accordingly and return with this questionnaire.

The product list has been attached in an excel file (see below) to aid with ease of completion, however this can be printed off and scanned or written up separately with the relevant information if preferred, the list is also included (see end of document) to enable manual input.



Please see attached document – 'FOI 25-207 Response Q3'.

#### 4. Wound Care Products

How many Vacuum Assisted Closure (VAC) or Negative Pressure Device/System therapy pumps are owned/contracted e.g.,

Please add numbers below:

Negat	ive Pressure devices		
Manufacture name	Product name		
Convatec	Avelle pump		
Nexa Medical	NEXA NPWT Device		
KCI MEDICAL	Nanova therapy unit		
Smith & Nephew	Pico 7		
Smith & Nephew	Pico 14		
Creed Medical Ltd	UNO dressing kits		
Other - Solventum	NPWT activac and ulra on rental/loan		
Other			
Other			

Please see attached document - 'FOI 25-207 Response Q4'.

How much is the service contract amount per year?

We are under Contract with KCI to supply and service our Activac devices free of charge as part of our consumables use agreement, so service costs are £0.

How many of these are in repair/lost?

None are lost or in repair.

If known, what is the cost of repair if not under a service contract?

There is no cost as repairs and swap outs are free of charge as part of the consumables contract agreement.

What was the price paid per unit for a VAC/NPD?

Section 43(2) applied, please see letter.

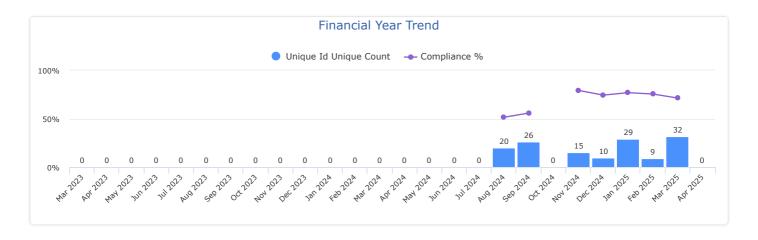
What is your annual spend on consumables for the VAC/NPD?

Approximately £40,000 excluding vat.

## 5. Trust Research and Development

How many wound related trials have you participated in over the last 5 years?
2
How many of those were commercially led trials?
None
How many of those were academic/internally led trials?
2
What is the average turnaround time for commercial R&D approval?
Normally within 30 days of receiving the LIP when our R&D team request it.

#### CQUIN Lower Limb Wound Audit



32

Mar 2025

Question	Community Nursing ALPS	Community Nursing Bexhill	Community Nursing East Eastbourne	Community Nursing Hailsham	Community Nursing Hastings & St Leonards	Community Nursing Rural Rother	Community Nursing Seaford	Community Nursing Victoria
ļ	Compliance %	Compliance %	Compliance %	Compliance %	Compliance %	Compliance %	Compliance %	Compliance %
Q01 - Have risk factors for delayed healing been considered and documented?	100.00%	100.00%	66.67%	100.00%	100.00%	75.00%	100.00%	100.00%
Q02 - Have any allergies been considered and documented?	75.00%	75.00%	33.33%	100.00%	100.00%	75.00%	100.00%	50.00%
Q03 - Have skin sensitivities been considered and documented?	50.00%	50.00%	0.00%	100.00%	100.00%	75.00%	75.00%	0.00%
Q04 - Has the impact of the wound on the patient's quality of life (physical, social & emotional) been considered and documented?	50.00%	50.00%	33.33%	75.00%	100.00%	75.00%	25.00%	25.00%
Q05 - Has the patient/carers been provided with information related to the care of the wound?	75.00%	50.00%	66.67%	0.00%	100.00%	50.00%	100.00%	100.00%
Q06 - Are the number of wounds identifiable within the documentation?	100.00%	100.00%	100.00%	100.00%	100.00%	50.00%	100.00%	100.00%
Q07 - Are the wound locations identifiable?	100.00%	100.00%	100.00%	100.00%	100.00%	75.00%	100.00%	100.00%
Q08 - Is the wound duration identifiable?	50.00%	50.00%	66.67%	100.00%	100.00%	75.00%	100.00%	75.00%
Q09 - Is the treatment aim documented?	100.00%	75.00%	66.67%	75.00%	80.00%	75.00%	50.00%	100.00%
Q10 - Is the planned re-assessment date identifiable?	100.00%	50.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Q11 - Has the wound/s been measured (Maximum length, width and depth)?	100.00%	100.00%	100.00%	100.00%	60.00%	75.00%	50.00%	50.00%
Q12 - Has undermining/tunnellin been considered and assessed?	0.00%	75.00%	100.00%		100.00%	0.00%	25.00%	
Q13 - Has the wound bed tissue type been documented?	75.00%	75.00%	100.00%	100.00%	100.00%	75.00%	50.00%	75.00%
Q14 - Has the wound bed tissue amount (%'s) been documented?	50.00%	75.00%	66.67%	100.00%	100.00%	50.00%	25.00%	25.00%
Q15 - Have the wound margins/edges been described?	50.00%	50.00%	100.00%	100.00%	80.00%	50.00%	25.00%	50.00%
Q16 - Has the colour and condition of surrounding skin been described?	100.00%	75.00%	100.00%	100.00%	100.00%	75.00%	100.00%	50.00%
Q17 - Has the wound healed?	50.00%	0.00%	66.67%	0.00%	0.00%	0.00%	0.00%	100.00%
Q18 - Has the presence of wound pain been assessed?	100.00%	100.00%	100.00%	100.00%	100.00%	50.00%	75.00%	100.00%
Q19 - Has wound pain frequency been assessed?	50.00%	75.00%	100.00%	100.00%	100.00%	0.00%	75.00%	50.00%

Q20 - Has exudate amount been assessed and documented?	100.00%	100.00%	66.67%	100.00%	100.00%	75.00%	100.00%	100.00%
Q21 - Has the exudate consistency/type/colo been documented?	100.00%	100.00%	100.00%	100.00%	100.00%	33.33%	100.00%	75.00%
Q22 - Has wound odour occurrence been identified?	0.00%	25.00%	66.67%	100.00%	100.00%	0.00%	25.00%	0.00%
Q23 - Have signs of systemic infection been considered and identified?	50.00%	50.00%	66.67%	100.00%	100.00%	33.33%	100.00%	0.00%
Q24 - Have signs of local wound infection been considered and identified?	33.33%	100.00%	66.67%	50.00%	100.00%	75.00%	100.00%	0.00%
Q25 - Has a wound swab been considered and taken?	0.00%	25.00%	0.00%	100.00%	100.00%	75.00%	0.00%	0.00%
Q26 - Has the patient been assessed for signs of venous disease?	50.00%	50.00%	66.67%	75.00%	100.00%	50.00%	0.00%	25.00%
Q27 - Has lower limb oedema been identified?	75.00%	75.00%	100.00%	100.00%	100.00%	50.00%	50.00%	75.00%
Q28 - Has joint mobility been assessed?	25.00%	50.00%	66.67%	100.00%	100.00%	100.00%	0.00%	50.00%
Q29 - Has the patient had a doppler to assess their arterial supply?	50.00%	25.00%	33.33%	100.00%	80.00%	75.00%	0.00%	50.00%
Q30 - Do you consider that this patient has had a full lower limb wound assessment?	50.00%	25.00%	33.33%	100.00%	80.00%	50.00%	25.00%	50.00%

Section Rank			
Section	Compliance % <del>▼</del>		
Wound Assessment Information	74.45		
General Health Information	71.25		
Lower Limb Specific	60.13		

	Question Rank
Question	Compliance % <del>▼</del>
Q07 - Are the wound locations identifiable?	96.88
Q01 - Have risk factors for delayed healing been considered and documented?	93.75
Q20 - Has exudate amount been assessed and documented?	93.75
Q06 - Are the number of wounds identifiable within the documentation?	93.75
Q10 - Is the planned re-assessment date identifiable?	93.55
Q18 - Has the presence of wound pain been assessed?	90.63
Q21 - Has the exu consistency/type/d been documented?	90.32
Q16 - Has the colour and condition of surrounding skin been described?	87.50
Q13 - Has the wound bed tissue type been documented?	81.25
Q27 - Has lower limb oedema been identified?	80.00
Q19 - Has wound pain frequency been assessed?	80.00
Q08 - Is the wound duration identifiable?	78.13
Q09 - Is the treatment aim documented?	78.13

Q11 - Has the	78.13
wound/s been	. 5.25
measured	
(Maximum	
length, width and	
depth)?	
Q02 - Have any	78.13
allergies been	
considered and	
documented?	
Q24 - Have signs	68.97
of local wound	
infection been considered and	
identified?	
Q05 - Has the	60.75
patient/carers	68.75
been provided	
with information	
related to the	
care of the	
wound?	
Q12 - Has	64.71
undermining/tunn	<del>- ··· -</del>
been considered a	
assessed?	
Q28 - Has joint	62.50
mobility been	
assessed?	
Q15 - Have the	62.50
wound	
margins/edges	
been described?	
Q14 - Has the	62.50
wound bed tissue	
amount (%'s)	
been documented?	
documented?	C1 F4
Q23 - Have signs of systemic	61.54
infection been	
considered and	
identified?	
Q03 - Have skin	59.38
sensitivities been	59.38
considered and	
documented?	
Q04 - Has the	56.25
impact of the	50.25
wound on the	
patient's quality	
of life (physical,	
social &	
emotional) been	
considered and	
documented?	
Q29 - Has the	53.13
patient had a	
doppler to assess	
their arterial	
supply?	
Q26 - Has the	53.13
patient been	
assessed for signs	
of venous	
disease?	
Q30 - Do you	53.13
consider that this	
patient has had a	
full lower limb	
wound	
assessment?	
Q22 - Has wound	40.00
odour occurrence	
been identified?	
Q25 - Has a	30.12
wound swab been	39.13
considered and	
taken?	
	25.00
O17 - Has the	/5 1111
Q17 - Has the wound healed?	25.00



# Policy for the use of Negative Pressure Wound Therapy (NPWT)

Document ID Number	222
Version:	V.4
Ratified by:	CHIC Governance
Date ratified:	12 <sup>th</sup> March 2025
Name of author and title:	Tissue Viability Team Lead. Tissue Viability Specialist
	Nurse
Date originally written:	December 2007
Date current version was completed	December 2024
Name of responsible committee/individual:	Pressure Ulcer steering group
Date issued:	03 April 2025
Review date:	December 2027
Target audience:	All Clinical Staff Trust wide that manage the provision or application of Negative Pressure Wound Therapy
Compliance with CQC Fundamental Standard	Safe care and treatment
Compliance with any other external requirements (e.g. Information Governance)	See reference pages
Associated Documents:	Policy for Wound management and decision cards Aseptic Non Touch (ANTT) Policy Policy and procedure for Consent ESHT Guidelines for assessment of Pain in Adult Inpatients ESHT Guidelines for Pressure Ulcer Prevention and Management Policy for decontamination of re-useable equipment Hand hygiene Policy for Healthcare workers

#### Did you print this yourself?

Please be advised the Trust discourages retention of hard copies of the procedural document and can only guarantee that the procedural document on the Trust website is the most up to date version

### **Version Control Table**

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1 2008334	December 2008		Acute discharge policy	For patient's transferring from hospital to community with NPWT
V1.0 2013113	July 2013		Acute Policy only	Policy for Community and Acute settings
	Oct 2017		Change in discharge arrangement	For patients discharge and funding arrangements
V.3	April 2021		Update of discharge arrangement and application	Patient discharge and application
V.4	Jan 2025		Update of discharge arrangement and application	

### **Consultation Table**

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or	Title	Date
group		
	Tissue viability team lead	Dec 2024
	Tissue Viability Specialist	Dec 2024
	Tissue Viability Specialist	Dec 2024
Mika Dave	At risk foot lead	Jan 2025
Pressure Ulcer Steering	Pressure Ulcer Steering	Jan 2025
Group	Group	
Sim Beaumont	EME Lead	Jan 2025

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

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#### Introduction

The policy has been developed by the East Sussex Healthcare Trust (ESHT) Tissue Viability team to support all clinicians in the clinical decision-making process for use of negative pressure wound therapy (NPWT).

The policy has been produced for use by any member of the healthcare team. It is not intended as a substitute for professional judgement but to support the practitioner in making an informed decision relating to management of the patients wound using NPWT.

In most cases wounds heal without a need for complex interventions and the ESHT policy for wound management and decision cards will provide the healthcare professional details on normal wound healing and measures that can be taken when this fail.

NPWT also known as topical negative pressure wound therapy, sub-atmospheric pressure dressings or vacuum sealing technique, is a therapeutic technique used to promote healing in acute or chronic wounds, fight infection and enhance healing.

NPWT is used to promote healing of chronic wounds and pressure ulcers by creating controlled negative pressure over the wound. The pressure is thought to aid the drainage of excess fluid, reduce infection rates (Ubbink et al. 2009) and increase localised blood flow increasing local vascularity and oxygenation of the wound bed. It can also reduce oedema through the increased blood flow and reduction of exudate and bacteria.

#### **Purpose**

This document identifies who can authorise the use of NPWT and its application. It describes essential requirements to obtain NPWT pumps for therapy and ongoing management.

It states the requirement for efficient management of a patients discharge arrangements to ensure that therapy can be continued if reasonably practicable when transferring to another setting and/or outside of our Trust.

#### Rationale

There are two main types of NPWT product:

- Reusable NPWT unit used with consumables (wound dressings & canister)
- Disposable 7-day NPWT kit

These guidelines have been written to promote appropriate and safe use of the NPWT reusable unit used with consumables, and NOT in relation to disposable units.

#### Clinical benefits of NPWT:

- Support or stabilise a wound e.g. a skin graft or a dehisced surgical wound
- Reduce the risk of contamination in deep pressure ulcers
- Remove tissue oedema for the removal of excess fluid
- Reducing exudate in highly exuding wounds
- Improves tissue perfusion
- Protection from outside contaminates
- Bringing wound edges in apposition
- Remove bacteria and protease enzymes and reduces potential of infection
- Reduce frequency of dressing changes, thus reducing nursing time for wound care and increasing patient comfort (Wanner 2003)
- Applies mechanical pressure to promote wound closure
- Remodel connective tissue matrix

#### Clinical Indications for use of NPWT

- Traumatic wounds
- Dehisced surgical wounds
- Diabetic ulcers/neuropathic ulcers
- Post op surgical wounds
- Pressure ulcers
- Sinus drainage and management
- Grafts sites/flap
- Necrotising fasciitis (once debrided fully)
- Abdominal dehiscence
- Fasciotomy wounds
- Leg ulcer

#### 2.2 Scope

This policy is for all staff involved in the provisions and application of NPWT in theatres, acute and community settings within East Sussex Healthcare Trust.

#### **Definitions**

**Negative Pressure Wound Therapy NWPT:** Delivery of the negative pressure to a wound in order to promote the normal physiological process of wound healing

Wound: Any break in skin integrity

**Filler:** Material used to fill a wound cavity to act as a medium for the delivery of NPWT (e.g. PHMB Gauze, Black foam or white foam)

**Wound Interface:** A material used as a contact layer between the wound filler and the wound bed (e.g. non-adherent gauze, silicone, antimicrobial product)

#### **Accountabilities and Responsibilities**

Tissue Viability specialist, (TVN) Vascular Nurse Specialist (VNS), at risk foot lead, Specialist consultant (e.g. vascular surgeons and Orthopaedic surgeons)

- Clinical advice regarding prescription of NPWT
- Monitoring of their patients when on NPWT within the acute setting and ensuring review of wound progress once discharged
- If NPWT pump removed in their clinic/OPD they are responsible for its return to the Trust's medical equipment library
- Providing education/training to the appropriate healthcare professionals who
  manage their patients or arrange industry representatives to deliver targeted
  specialist training i.e. theatre

Medical equipment library team and EME team

- Asset registration and maintenance (cleaning) of NWPT whilst on site
- Monitoring of equipment transfers within the acute trust and liaising with community to collect equipment loans
- Ensuring adequate stock levels of NPWT available and liaising with TVN team when stock low
- Provision of the equipment and consumable to in-patients with supplies available on discharge
- Monitoring pump usage daily and maintaining electronic records
- Ordering of additional ad-hoc NWPT units from supplier when both sites in-house units are in use following discussion with the TVN (Appendix 1)

#### Clinical staff applying NPWT

- Application of NPWT is by a registered nurse/practitioner or Band 4 nursing practitioner that has been assessed as competent with application and setting up of the NPWT pump
- The registered nurse/practitioner or band 4 nursing practitioner is deemed competent if obtained through guided study session, supervised practice by TVN/VSN/At risk foot lead or industry representative (Appendix 2)
- Upon removal of the NPWT unit it is the responsibility of the nurse completing
  dressing change to dispose of the canister as clinical waste and clean the unit with
  hard surface detergent wipes, as per decontamination policy for re-useable
  equipment
- If NPWT pump is removed in their clinic/OPD or community home setting, they are responsible for its return to the Trust's medical equipment library at either the Conquest or Eastbourne District General (EDGH)
- It is the responsibility of ward/clinic clinical team to inform the community nurses that a patient requires NPWT on discharge and give 48hrs notice.
- Staff to complete Heath & Social care (HSCC) referral on discharge if discharging within ESHT

- To inform the equipment library of transfer of care and a supply of consumables can be provided
- If discharge in community **outside of ESHT** to liaise with TVN/VNS/At risk foot lead. Staff to complete HSCC referral with 72 hrs notice prior to discharge so they can arrange NPWT pump from their own TVN with pump and consumables (Appendix 3)

#### **Process**

Refer to TVN/VSN/At risk foot lead/Consultant to determine if NPWT is appropriate  Candidates for NPWT should be carefully assessed prior to treatment and informed consent obtained  It must be carefully explained to each patient that they will have a vacuum device on their wound for 24 hours per day and their permission to undertake the therapy must be gained before proceeding  Document that the patient understands and has agreed to the treatment and informed consent is obtained  Tep 3 - Assessing the wound and patient  A holistic assessment should be undertaken,	<ul> <li>NPWT to be used appropriately</li> <li>Assess the patient and wound to determine if NPWT is a potentially appropriate treatment option</li> <li>The application of NPWT should not be applied without patient consent</li> <li>Consent must be based on an informed decision</li> </ul> Holistic assessment and accurate documentation
lead/Consultant to determine if NPWT is appropriate  Step 2 – Obtaining informed consent  Candidates for NPWT should be carefully assessed prior to treatment and informed consent obtained  It must be carefully explained to each patient that they will have a vacuum device on their wound for 24 hours per day and their permission to undertake the therapy must be gained before proceeding  Document that the patient understands and has agreed to the treatment and informed consent is obtained  Step 3 – Assessing the wound and patient	<ul> <li>Assess the patient and wound to determine if NPWT is a potentially appropriate treatment option</li> <li>The application of NPWT should not be applied without patient consent</li> <li>Consent must be based on an informed decision</li> </ul>
<ul> <li>Candidates for NPWT should be carefully assessed prior to treatment and informed consent obtained</li> <li>It must be carefully explained to each patient that they will have a vacuum device on their wound for 24 hours per day and their permission to undertake the therapy must be gained before proceeding</li> <li>Document that the patient understands and has agreed to the treatment and informed consent is obtained</li> <li>Step 3 – Assessing the wound and patient</li> </ul>	<ul> <li>NPWT is a potentially appropriate treatment option</li> <li>The application of NPWT should not be applied without patient consent</li> <li>Consent must be based on an informed decision</li> </ul>
assessed prior to treatment and informed consent obtained  It must be carefully explained to each patient that they will have a vacuum device on their wound for 24 hours per day and their permission to undertake the therapy must be gained before proceeding  Document that the patient understands and has agreed to the treatment and informed consent is obtained  Step 3 – Assessing the wound and patient  H	<ul> <li>NPWT is a potentially appropriate treatment option</li> <li>The application of NPWT should not be applied without patient consent</li> <li>Consent must be based on an informed decision</li> </ul>
has agreed to the treatment and informed consent is obtained  Step 3 – Assessing the wound and patient  H	dolistic assessment and accurate documentation
	folistic assessment and accurate documentation
A holistic assessment should be undertaken,	
including a full nutritional assessment and vascular studies where appropriate	<ul> <li>Thorough holistic assessment and accurate documentation are a prerequisite to effective wound management</li> </ul>
For treatment of pressure ulcers the patient should be assessed as to their pressure ulcer risk and appropriate interventions introduced to minimise exposure to pressure loads	<ul> <li>The use of a wound assessment tool facilitates accurate documentation</li> <li>The dressing must have a seal or the negative pressure cannot be achieved</li> </ul>
<ul> <li>Wound characteristics are recorded on the Wound Care plan/Assessment/Evaluation Tool</li> </ul>	F. 5554.5 54.115. 55 45110764
Measure the wound accurately using the tracing method / paper ruler / wound swab or probe and aim for a photograph prior to application and after NPWT treatment is completed	
Step 4 – Wound documentation T	o ensure correct ordering of NPWT for wound type

Step 5	Size, depth and measurement  NPWT is suitable for most types of infected sloughy (never apply to hard eschar)  Refer to contraindications (7.1)  - Wounds that are not generally suitable WT	Discuss with TVN/VSN/At risk foot team/consultant/experienced ward staff
•	Refer to contraindications (7.1)	
Step 6	– Ordering procedure forms	
•	Consider if NPWT is appropriate  The loan unit will come from the Equipment Library in the acute sites  If in community via the community TVN/VNS  Via acute TVN team for patients referred from Brighton & Sussex University Hospital	The number of obstacles to ordering will be removed and therapy commenced earlier
Step7-	NPWT will be commenced by a person deemed competent or in theatre under direction of a surgical consultant  Spare consumables should be available at all times in Equipment library (Acute) during the day and from porters/site managers when out of hours  Advice of TVN/VNS/At risk foot team / consultant should be sought for any concerns about the wound condition, application or removal of NPWT  The equipment librarian must be informed of all NPWT applied  Wards to supply the Equipment librarians with patient identification labels and details if being discharged to different address	<ul> <li>Correct ordering and to ensure appropriately trained staff available to completed application</li> <li>This will ensure the optimum product is delivered to the patient on time, is appropriate and cost effective for that individual</li> <li>The patient will receive optimum and safe care</li> </ul>
Step 8	- Ordering of NPWT Community	
•	Community TVN/VSN/At risk foot lead orders the loan unit from acute hospital equipment librarian and either collected from acute sites or sent via courier to community office, not in the post and never direct to patients address	

<ul> <li>Wards to supply the Equipment librarians with patient identification labels and details if being discharged to different address</li> </ul>	
Step 9 - Delivery	
<ul> <li>Product will be delivered directly to the hospital ward/clinic by equipment librarian in hours</li> <li>Conquest have NPWT pumps available out of hours in the equipment library accessed by site managers</li> <li>Dressing consumable will be supplied to the ward/unit/clinic and will supply 1 week on discharge</li> </ul>	
Step 10 - Application	
<ul> <li>NPWT should only be undertaken by an individual who has previous practical experience in the management of wounds, a thorough understanding of the wound healing process</li> <li>Has received the appropriate training</li> <li>Has been deemed competent</li> </ul>	<ul> <li>This is important to maintain appropriate standards of care</li> <li>NPWT Competencies (Appendix 2)</li> </ul>
Step 11 - What is required for dressing	
Prepare the following items:  The NPWT unit A pack of NPWT dressings and tubing (depend on NPWT used) A canister Pair of sterile scissors Orange hospital / white bag Duoderm Silicone layer n/saline	The dressings selected will be determined by the size and location of the area to be treated, but for a simple procedure these items will generally suffice
Step 12 – Preparation of sterile field	
<ul> <li>Ensure hand hygiene is applied before and after the dressing is applied</li> <li>Wear appropriate PPE as per ANTT or standard universal precautions</li> <li>Organise the materials and layout on a suitable surface, using an aseptic technique</li> <li>Ensure the patient is positioned comfortably and in a suitable position for the dressing to be applied and that they fully understand all aspects of the treatment</li> </ul>	Follow the hand hygiene policy for healthcare workers
Step 13 – Preparation of the wound site	

- Remove any existing dressing and clean the wound with normal saline to remove any dressing residues
- A hydrocolloid dressing can be used to frame the wound margins where there is a risk of applying negative pressure suction to the surrounding skin or bridging technique's
- If the patient is sensitive to adhesives, similar barrier film can be applied
- N/A or silicone layer is used to line wound bed if black foam or either bone, tendon or graft visible
- Cut foam to size to place into wound (not too tightly) or if using the gauze technique place loosely into wound
- Document number of dressing pieces placed into the wound in the patients notes and ensure number corresponds on removal
- Special care is needed when applying NPWT to delicate area i.e. feet and around toes
- The film and the tubing should be applied according to the manufacturer's instructions
- The vacuum unit should be set to the mmHg recommended by the manufacturer

- This is to prevent adherence of the foam causing damage to new 'granulation' or structures
- This protects the peri-wound skin and forms a layer upon which to attach the film
- Manufacturers recommendations for negative pressure settings are based on type of wound filler used
- Gauze is low density so set on lower setting 75mmHg
- Black foam 125mmHg

#### **Step 14 Combination Therapy**

 Foam and gauze fillers may be combined within the same wound when tunnelling or undermining is present

#### **Step 15 Discontinuation of NPWT**

- Ensure wearing the correct Personal Protective Equipment (PPE Uniformly granulating tissue is achieved in the wound bed
- Granulation is level with the surrounding skin
- · Patients overall condition/wound is improving
- No progression of the wound is observed after 2 weeks of consecutive dressing change. discuss with TVN/VS/At risk foot lead for possible review/discontinuation
- · Patent complains of excessive pain
- Patient withdraws consent to treatment
- Wound bed is ready for grafting/skin flap
- Alternative treatment option is more suitable of the initial goals have been met

- Discuss discontinuing therapy with the TVN/VN/At risk foot lead/ward team
- Apply appropriate PPE and remove pump from the patients. Infection control policy for Medical Devices as per decontamination of equipment policy

#### Return

- In acute: phone the equipment librarian to come and collect pump, charger and case from the ward
- In community: phone the TVN/VS/At risk foot lead or acute equipment librarian that NPWT discontinued
- Return pump back to acute via courier from community bases or community team delivering direct to acute. DO NOT put in the post

Step 16 - patient is discharged from Acute to community within ESHT	
Patients to be referred to those responsible for onward post discharge care at the earliest opportunity	Discharge flowchart within ESHT (Appendix 1 )
At least 48hrs notice is expected	
<ul> <li>Referral HSCC with full details of wound and history, NPWT currently in use, and type of dressing in use, when last changed and when next due</li> </ul>	
<ul> <li>The community nursing team must also agree to accept care of the patient and be available on the next day that a dressing change is required</li> </ul>	
<ul> <li>Activac NPWT pumps must be sent out with transit case, battery charger and dressings for 3 changes</li> </ul>	
<ul> <li>Patients not to be discharged with VAC Ulta, this is for Acute hospital use only</li> </ul>	
•	
Step 17 If patient discharged out of area	
NO trust device or consumables to be sent out with patient as surrounding NHS Trusts use different NPWT that are not compatible	
<ul> <li>Patients to be referred to those responsible for onward post discharge care at the earliest opportunity</li> </ul>	
<ul> <li>At least 72 hrs notice is expected</li> </ul>	
<ul> <li>Referral HSCC with full details of wound, current treatment and history, and why NPWT is required to be continued on discharge</li> </ul>	
<ul> <li>Conventional dressing in place for discharge and 1/52 of dressing supplied</li> </ul>	

#### **Special Considerations**

#### 6.1 Contraindications

- Malignancy in the wound
- Untreated Osteomyelitis
- Unexplored fistulas
- Necrotic tissue with hard eschar present
- Exposed blood vessels (under the care of a vascular team in a hospital setting only)
- Exposed organs
- Bleeding wounds
- Patients on anticoagulants should be treated with precaution
- Patients with acute pain in the wounds
- Patients with low albumin levels
- Not MRI compatible, dressing can stay in place

Special attention to the risk of bleeding should be considered when prescribing in the home situation

#### Cautions

- Patients on anticoagulation therapy should be treated with precaution and review of INR
- The therapy should be reassessed if any measurable degree of wound healing has failed to occur over the prior 14 days
- Check for blood in the tubing daily in hospital or ask carers to monitor and provide an emergency number should that occur
- Ensure that a seal is always maintained around the wound
- It is imperative that nurses are competent and, if care is at home, that patients and/or their carer's are taught to manage NPWT to ensure maximum effectiveness and safety
- Discomfort and pain may indicate that removal of NPWT is required
- Risk of falls, is the patient safe to carry the pump?
- Excessive tissue growth into the dressing can occur if the dressing is left on for longer than 48 hours to 72 hours
- Manage poor nutrition and refer to dietician following MUST assessment and Monitoring systems in place with NPWT

#### **Evidence Base/References**

Catarino PA, Chamberlain MH, Wright NC, Black E, Campbell K, Robson D, Pillai RG. High-pressure suction drainage via a polyurethane foam in the management of poststernotomy mediastinitis. *Annals of Thoracic Surgery*. 2000;**70**(6):1891-1895.

Doss M, Martens S, Wood JP, Wolff JD, Baier C, Moritz A. Vacuum-assisted suction drainage versus conventional treatment in the management of poststernotomy osteomyelitis. *European Journal of Cardio-Thoracic Surgery*. 2002;**22**(6):934-938.

Ubbink DT, Westerbos SJ, Evans D, Land L, Vermeulen H. (2009) Topical negative pressure for treating chronic wounds (Review) The Cochrane Collaboration. Published by JohnWiley & Sons, Ltd.

#### **Competencies and Training Requirements**

Training will be made available to all clinical staff via the TVN/VNS/At risk foot lead either in prearranged sessions taken by industry, study sessions or directly with individual patients

Training records for nursing staff should be maintained by clinical areas that use NPWT regularly as part of the staff PDR and should maintain a compliancy each 3-year period

Supplier will be responsible for ensuring education is optimised in their product and support the teams with training delivery. On-line resources will be available on the Tissue Viability extranet page - <u>Tissue viability – Resources (Tissue Viability) - tasks and guides (esht.nhs.uk)</u>

Competencies will be undertaken following each training session and signed off by TVN/VN/At risk foot lead (Appendix 2)

#### Appendix A: VAC pump Ad-hoc ordering guidelines

#### Procedure to rent in VAC pumps when no pumps available

- 1. When a ward requests a VAC pump from the equipment library for inpatients, inform that NONE are available so will be hired
- 2. Inform them that this may take up to <u>72hrs from when KCI</u> phoned
- 3. Non stock form to be filled out by the librarian including what type of VAC pump i.e. Activac or Ulta
- 4. Give the form to the ward so they can get the head of nursing (HON) or deputy HON to authorise
- When signed and patient label attached librarian to phone EME to request purchase order number. Phone KCI to order pump to be delivered to the library
- 6. KCI 0800 980 8880 (delivery up to 72hrs)
- 7. Record on the VAC list under 'hires' with full details obtained from patient label and ward that requested pump
- 8. Once the library has pumps available, they need to be swapped out. Inform the ward and ask for pump to be changed. Collect hired pump, storing in the library for collection by KCI. Phone KCI to cancel hire
- 9. Inform TVN team via e-mail when pumps are returned to the library so they can monitor usage and swap any rentals in the community <a href="mailto:esht-acutetissueviability@nhs.net">esht-acutetissueviability@nhs.net</a>

## Librarian's daily checks

- To check daily that the patient is still in hospital and pump still in use
- Provide any dressings and ask if any discharge plans
- If the patient address is outside ESHT please e-mail TVN team

## VAC returns

 When Activac is returned please check and follow vac pump return procedures remembering to clear the memory and reset

### Appendix B: Negative pressure wound therapy equipment competency

## **Equipment Competency Risk Level Medium**

## **Equipment Description VAC Pump**

Manufacturer/Supplier KCI

**Location** Trust wide

Model VAC Ulta / Activac





• Assessor - must have a Recognised Mentorship Qualification and/or have completed the relevant Key Trainers session.

	user must demonstrate the following etence:	Training Given Date	Competent $\sqrt{}$
	Preparation		
1.1	State the clinical application of the VAC pump		
1.2	Explain the safety checks and precautions to be taken prior to using the pump		
1.3	Identify appropriate equipment needed		
1.4	State the function of all the soft keys and ndicators on the front panel		
	Set up and operation		
2.1	Demonstrate pre-operational inspection of the VAC Ulta / ActiVAC		
2.2	Explain the main features of the device		
2.3	Demonstrate the power on/off process		
2.4	Demonstrate how to insert and release the canister		
2.5	Demonstrate the ability to apply VAC therapy dressings:-		
	<ul> <li>Selection of appropriate dressing for wound type</li> </ul>		
	Trims dressing to relevant size		
	<ul> <li>Creates and maintains an adequate seal using VAC drape</li> </ul>		

	user must demonstrate the following etence:	Training Given Date	Competent $\sqrt{}$
	<ul> <li>Application of the Sensa T.R.A.C pad and</li> </ul>		
	tubing and connection to canister tubing		
2.6	Select appropriate therapy settings including		
	<ul> <li>Continuous/intermittent therapy/ Intensity</li> </ul>		
2.7	Start therapy delivery		
2.8	Aware of the following prompts and alarms and actions required		
	Canister full		
	<ul><li>Leak</li></ul>		
	Tubing blockage		
	Battery exhausted		
	Therapy not activated		
	Tubing test		
2.9	Demonstrate the ability to access and activate key features		
	Seal Check		
	Therapy history		
	<ul> <li>Patient and clinician home screens</li> </ul>		
	Patient history		
	Night mode (night mode)		
	Maintenance		
3.1	Explain the battery life and maintenance		
3.2	Switch the pump of and discuss cleaning and storage procedures		
3.3	Explain the procedure for maintenance and repair		

Competence of users must be recorded and kept locally in the Medical Device Folder

Copies of the assessment must be sent to the Medical Device Training Educators. This will ensure that the training is recorded on ESR esh-tr.MedicalDevicesEducators@nhs.net

Statement: I certify that I am aware of my professional responsibilities for continuing professional development and I realise that I am accountable for my actions. I therefore state, I am competent in using this device in a safe manner.

Assessor Signature:	Ward/Unit:
Print Name:	User Signature:
Date:	Print Name:
UIN:	Job Title:
	Date:

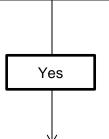
## **Competency Review Date:**

Appendix C: Negative pressure wound therapy discharge flowchart

Negative Pressure Wound Therapy (NPWT) Discharge Flowchart

#### Is the patient being discharged within ESHT:

- Hastings & St Leonards
- Bexhill & Rother
- Eastbourne, Hailsham, Polegate or Seaford



#### Home & intermediate care setting

- Inform the equipment librarians to ensure discharge destination within ESHT
- Ward Staff to complete HSCC referral to community nursing team giving 48hrs notice
- If complex wound discusses with community team
- Request 1/52 weeks supply of dressings from equipment library
- Ensure the patient has a 2/52week review planned i.e Podiatry, community TVN or clinic OPA

## Discharge to <u>other care setting</u> <u>outside ESHT</u>

No

- Ward staff to complete HSCC referral to community nursing team to inform them currently patient is receiving NPWT therapy and current treatment plan
- Must give at least 72hrs
   notice prior to discharge for
   their Trust to arrange
   community TVN input &
   pump OR a plan of care
- STOP pump on discharge
- DO NOT send rental pump outside of ESHT
- Charge for replacement pumps by ward if send £8000
- Review dressing type for interim/discharge
- Liaise with TVN/VN/At risk foot lead if assistance required for safe discharge

ALL pumps belong to <u>Tissue Viability</u> and **MUST** be returned to the Acute Trust Equipment Library's when therapy **STOPPED** ASAP



## Appendix D: Document monitoring table

## **Document Monitoring Table**

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Use of NPWT	Tissue Viability specialist/Vascular specialist nurse/At risk foot lead	Referrals	As and when required	Tissue Viability specialist/Vascular specialist nurse/At risk foot lead	Pressure ulcer steering group	Pressure Ulcer steering group
Staff competencies	Tissue Viability specialist/Vascular specialist nurse/At risk foot lead	ESR	As required Resources available on the extranet	TVNs & clinical educators for the Supplier	TVN/VSN & clinical educators from the NPWT supplier	Pressure ulcer steering group

#### Appendix E - Equality and Health Inequalities Impact Assessment (EHIA) template

Undertaking EHIA helps us to make sure that our services and polices do not inadvertently benefit some groups more than others, ensuring that we meet everyone's needs, and our legal and professional duties.

This is important because:

- Assessing the potential for services and policies to impact differently on some groups compared with others is a legal requirement.
- People who find it harder to access healthcare services are more likely to present later when their disease may be more progressed, have poorer outcomes from treatment, and need more services than other groups who have better access.

The Equality Act 2010 legally protects people from discrimination in the workplace and in wider society. It is against the law to discriminate against anyone because of:

- age
- gender reassignment
- being married or in a civil partnership
- being pregnant or on maternity leave
- disability
- race including colour, nationality, ethnic or national origin
- religion or belief
- sex
- sexual orientation.

These are called 'protected characteristics'. The Act requires that public sector organisations meet specific equality duties in respect of these protected characteristics. This is known as the public sector equality duty.

#### **Public Sector Equality Duty**

Public bodies have to consider all individuals when carrying out their day-to-day work – in shaping policy, in delivering services and in relation to their own employees.

Public bodies must have due regard to the need to:

- eliminate discrimination
- advance equality of opportunity
- foster good relations.

#### **Armed Forces Covenant Duty**

The new Covenant Duty raises awareness of how Service life can impact on the Armed Forces community, and how disadvantages can arise due to Service when members of that community seek to access key local services. The Duty requires organisations to pay due regard to the Covenant principles when exercising functions in healthcare. "Due regard" means that we need to consciously consider the unique obligations and sacrifices made by the Armed Forces; that it is desirable to remove disadvantages faced by the Armed Forces community; and that special provision may be justified in some circumstances.

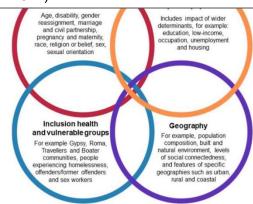
#### **Health Inequalities Duties- Equity for all**

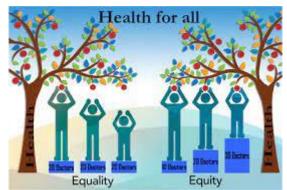
In addition to our legal duties in relation to Protected Characteristics, the Health and Social Care Act and other legislation, NHS Planning Guidance and sector specific recommendations require the NHS to have regard to the need to address health inequalities (or differences in access to or outcomes from healthcare) and take specific action to address them.

Figure 1 shows the different population groups, factors associated with where we live, or our individual circumstances, which separately, or when combined, influence access to and outcomes from health care.

Getting equal outcomes may require different inputs (or services). In completing an EHIA its important to think about whether a one size fits all approach will generate the same good outcomes for everyone, or whether we might need to make some tweaks or adjustments to enable everyone to benefit equally. The health tree diagram shows that unless we think about the needs of different people, equal services might generate unequal outcomes.

Factors associated with poorer health outcomes (PHE 2021)<sup>1</sup>





The Health Tree<sup>1</sup>

The following principles, drawn from case law, explain what we must do to fulfil our duties under the Equality Act:

- **Knowledge:** everyone working for the Trust must be aware of our equality duties and apply them appropriately in their work.
- **Timeliness:** the duty applies at the time of considering policy options and/or <u>before</u> a final decision is taken not afterwards.
- Real Consideration: the duty must be an integral and rigorous part of your decision-making and influence the process.
- Sufficient Information: you must assess what information you have and what is needed to give proper

consideration.

- **No delegation:** the Trust is responsible for ensuring that any contracted services which provide services on our behalf can comply with the duty, are required in contracts to comply with it, and do comply in practice. It is a duty that cannot be delegated.
- **Review:** the equality duty is a continuing duty. It applies when a policy/process is developed/agreed, and when it is implemented/reviewed.
- **Proper Record Keeping:** to show that we have fulfilled our duties we must keep records of the process and the impacts identified. NB: Filling out this EHIA in itself does not meet the requirements of the equality and health inequalities duties. All the requirements above must be fulfilled or the EHIA (and any decision based on it) may be open to challenge. Properly used, an EHIA can be a tool to help us comply with our equality and health inequalities duty and as a <u>record</u> that to demonstrate that we have done so. It is advised that you complete the short EHIA training session on MyLearn before completing this EHIA.

#### SECTION A ADMINISTRATIVE INFORMATION

This form is a central part of how the Trust makes sure and can demonstrate to others that we are meeting our legal duties; and how we can assure ourselves that all patients will get the best outcome for them from our services.

A completed copy of this form must be provided to the decision-makers in relation to your proposal. The decision-makers must consider the results of this assessment when they make their

Policy for the use of Negative Pressure Wound Therapy (NPWT) V3

 $<sup>^1\</sup> https://www.researchgate.net/figure/Equality-and-equity-of-medical-resources-distribution\_fig2\_323266914$ 

decision about your proposal. Function/policy/service name and number:			
Main aims and intended outcomes of the function/policy/service and summary of the changes you are making (if existing policy/service):	This policy has been developed by the East Sussex Healthcare Trust (ESHT) Tissue Viability team to support all clinicians in the clinical decision-making process for use of negative pressure wound therapy (NPWT).		
	NPWT also known as topical negative pressure wound therapy, sub- atmospheric pressure dressings or vacuum sealing technique, is a therapeutic technique used to promote healing in acute or chronic wounds, fight infection and enhance healing. NPWT is used to promote healing of chronic wounds and pressure ulcers by creating controlled negative pressure over the wound		
	The policy has been produced for use by any member of the healthcare team. It is not intended as a substitute for professional judgement but to support the practitioner in making an informed decision relating to management of the patients wound using NPWT		
How will the function/policy/service change be put into practice?	This is not a new policy just updated. NPWT is an established therapy used within both the acute and community settings.  These guidelines have been written to promote appropriate and safe use of the NPWT reusable unit used with consumables, and NOT in relation to disposable units		
Who will be affected/benefit from the policy?	This document identifies who can authorise the use of NPWT and its application. It describes essential requirements to obtain NPWT pumps for therapy and ongoing management.		

	arrangements to e	It states the requirement for efficient management of a patients discharge arrangements to ensure that therapy can be continued if reasonably practicable when transferring to another setting and/or outside of our Trus		
State type of policy/service	Policy X	Service 2		
	Business Case 2	Function 2	Existing	
Is an EHIA required?  NB :Most policies/functions will require an EA with few	Yes X	Yes X		
exceptions such as routine procedures	No ② (If no state reasons)			
Accountable Director: (Job Title)	Suzanne Stone Head of N	Suzanne Stone Head of Nursing for CHIC		
Assessment Carried out by:	Name:			
	Tissue Viability Team Le	ead		
Contact Details:				
Date Completed:	18/12/2024	18/12/2024		

#### SECTION B ANALYSIS AND EVIDENCE

#### Analysis of the potential impact – Equality and Health Inequalities Duties

For this section you will need to think about all the different groups of people who are more likely to experience poorer access or have poorer outcomes from health and care services. For each group please describe in the first column the potential impact you have identified, in the second column explain how you have arrived at this conclusion and what information you used to identify the potential impact, and in the third column say what you are going to do to prevent it from happening, or which elements of a service or policy specifically address the potential impact. Key things to remember.

- Everyone has protected characteristics but some groups who share one or more protected characteristics may be more likely to have poorer outcomes or access compared with others and it is this potential that the EHIA process seeks to identify and address.
- The information included here should be proportionate to the type and size of the policy/service/change.
- An update to a policy should demonstrate that you have considered the potential for the policy to impact differently on different groups and taken steps to address that.

- A minor policy update is likely to need to be much less comprehensive than an EHIA for a major service change.
- You will need to know information about who uses or could use your service/policy will apply to (the population). You can use information about current patients or staff, and about the general population the Trust serves.

### 3. PROTECTED CHARACTERISTICS - Main potential positive or negative impact of the proposal for protected characteristic groups summarised

Please write in the box below a brief summary of the main -potential impact (positive or negative) Please state N/A if your proposal will not impact adversely or positively on the protected characteristic groups listed below, but make sure you include information on how you know there will be no impact.

The use of NPWT is for healing and management of complex wounds. They are contraindications to use so may have a negative impact (cannot be used on) any groups of patients.

The TVN/community nursing service is only commissioned for over 18 years of age so this policy will have a negative impact on those under 18 years of age that will not be receiving specialist input or use NPWT according to this policy.

Protected characteristic groups	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Age: older people; middle years; early years; children and young people.	The service and use of NPWT in this policy is for people over 18 years of age	Patients under 18 years of age will be referred to the appropriate specialist for assessment.  Non-commissioned service to under 18 years of age	Referral to specialist children services for wound review
<b>Disability:</b> physical, sensory and learning impairment; mental	Consideration for NPWT will take a holistic assessment to ensure safe use with those with some levels of		

Protected characteristic groups	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
health condition; long-term conditions.	disability or ability to self-manage the device le, Risk of falls, is the patient safe to carry the pump?		
Gender Reassignment and/or people who identify as Transgender	No impact		
Marriage & Civil Partnership: people married or in a civil partnership.	No impact		
Pregnancy and Maternity: before and after childbirth and who are breastfeeding.	No impact		
Race:	No Impact		
Religion and belief: people with different religions/faiths or beliefs, or none.	No impact		
Sex:	No impact		

Protected characteristic groups	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Continued on next page			
Sexual orientation	No impact		
Veterans/Armed Forces Communities	No impact		

#### 4. HEALTH INEQUALITIES -Potential positive or adverse impact for people who experience health inequalities summarised

Please briefly summarise the main potential impact (positive or negative) on people at particular risk of health inequalities (as listed below). If the policy/procedure is unrelated to patients, this sections does not require completion.

Please state none if you have assessed that there is not an impact, but please make sure you complete the 'how do you know this' column to demonstrate that you have considered the potential for impact. If you identify the potential for impact for one or more of these groups please complete the full assessment in Appendix A

Groups who face health inequalities <sup>2</sup>	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
This includes all groups of people who may have poorer access to or outcomes from healthcare services. It includes: People who have experienced the care system; carers; homeless people; people involved in the criminal justice system; people who experience substance misuse or addiction; people who experience income or other deprivation; people with poor health literacy; people living in rural areas with limited access to services; refugees or asylum seekers; people in or who have been in the armed force; other groups who you identify as potentially having poorer access and outcomes.	The patient needs to have access or registered with a skilled health care professional who is can/manage the change the dressing every 2-3 days If not accessing healthcare, then the therapy cannot commence until this is addressed  Also, if in an area i.e prison where the therapy is not a standard treatment and no staff skilled in its use.  The device requires a power supply to function so would have to have regular access to accommodation to achieve this	Application of NPWT is by a registered nurse/practitioner or Band 4 nursing practitioner that has been assessed as competent with application and setting up of the NPWT pump.	Consideration to how and where they can access healthcare would be discussed.  • Attendance at a clinic  • Discuss with the Adult social care regaining concerns if no housing or if required help in identifying sources of support

#### **SECTION C ENGAGEMENT**

#### 5. Engagement and consultation

a. Talking to patients, families and local communities can be a rich source of information to inform health care services. If you are making substantial changes it's likely that you'll have to undertake specific engagement with patients. For smaller changes and policies your may have undertaken some engagement with patient groups, gained insight from routine sources e.g. patient surveys, PALS or Complaints information or information from Healthwatch, you may also have looked at relevant engagement that others have undertaken in the Trust, or locally Have any engagement or consultative activities been undertaken that considered how to address equalities issues or reduce health inequalities? Please place an x in the appropriate box below.

Yes	No x

b. If yes, please ensure all stakeholders are listed in the consultation table at the beginning of the policy.

#### SECTION D SUMMARY OF FINDINGS

Reflecting on all of the information included in your review-

6. EQUALITY DUTIES: Is your assessment that your proposal will support compliance with the Public Sector Equality Duty? Please add an x to the relevant box below.

	Tackling discrimination	Advancing equality of opportunity	Fostering good relations
The proposal will support?			
The proposal may support?			X
Uncertain whether the proposal will support?	X	Х	

7. HEALTH INEQUALITIES: Is your assessment that your proposal will support reducing health inequalities faced by patients? Please add an x to the relevant box below.

	Reducing inequalities in access to health care	Reducing inequalities in health outcomes

The proposal will support?		
The proposal may support?		
Uncertain if the proposal will support?	х	Х

### **8. Outstanding key issues/questions that may require further consultation, research or additional evidence.** Please list your top 3 in order of priority or state N/A

Key issue or question to be answered		Type of consultation, research or other evidence that would address the issue and/or answer the question
1		
2		
3		

#### 9. EHIA sign-off: (this section must be signed)

Person completing the EHIA:		Date: 18/12/24
Line Manager of person completing:	Suzanne Stone	Date: 18/12/24

#### Appendix A

Breakdown of Groups who are more likely to experience health inequalities:

Groups who face health inequalities <sup>3</sup>	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Looked after children and			
young people			
Carers of patients			
Homeless people. People on the street; staying temporarily with friends /family; in hostels or B&Bs.			
People involved in the criminal justice system: offenders in prison/on probation, ex-offenders.			
People with addictions and/or substance misuse issues			
People or families on a low income			
People with poor literacy or health Literacy: (e.g. poor understanding of health services poor language skills).			

Groups who face health inequalities <sup>3</sup>	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
People living in deprived areas			
People living in remote, rural and island locations			
Refugees, asylum seekers or those experiencing modern slavery			
People who have served in the Armed Forces			
Other groups experiencing health inequalities (please describe)			

Appendix B – EHIA Resources

Sources of Information on the East Sussex population and sources of community or patient insight.

Population Data

State of the County 2021 Focus on East Sussex

East Sussex JSNA

**Community Insight** 

Further Reading on Equality and Health Inequalities

**Training** 

Doc ID# Policy for the use of Negative Pressure Wound Therapy (NPWT)

## Policy for the use of Negative Pressure Wound Therapy (NPWT)



#### Appendix F: Staff feedback form

Please complete this form if you would like to make a comment on the procedural document you have just read. Your feedback will be held by the Assurance Manager and your views will be taken into account at the next review date of the document.

Title of the procedural document:	
Date of next review:	
Your name (optional):	
Date today:	
Your comments:	

Thank-you for your feedback

Please forward this form to: Assurance Manager (NHSLA)



## **Guideline for the Management of Lower Leg Ulceration**

Document ID Number:	401
Legacy ID Number:	1452
Version:	V3
Ratified by:	CHIC Divisional Governance
Date ratified:	March 2025
Name of author and title:	- Tissue Viability Specialist  Practitioner  - Tissue Viability Specialist
	Nurse  - Tissue Viability Team Lead  - Tissue Viability Specialist Nurse  - Tissue Viability Specialist Nurse
Date originally written:	May 2014
Date current version was completed:	January 2025
Name of responsible committee/individual:	Pressure Ulcer Steering Group
Date issued:	19 March 2025
Review date:	January 2028
Target audience:	All staff managing patients with lower limb conditions.
	All staff commissioning or managing teams dealing with patients with lower limb conditions.
Compliance with CQC Fundamental Standard	Safe Care and treatment Person Centred Care
Compliance with any other external requirements (e.g. Information Governance)	N/A
Associated documents	National Wound Care Strategy Programme – Leg Ulcer Recommendations 2024.
	Antimicrobial prescribing policy for adults and children.
	Consent to treatment, examination and care policy and procedure.
	Nutrition and Hydration policy for adults.
	Guidelines for analgesia in the management of acute pain in adult inpatients.
	Infection control policy. Policy for Wound management and decision cards.
	Sussex Wide dressing formulary.

#### **Version Control Table**

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1.0 2014098	May 2014	Tissue Viability Team	New document	Best practice update. Restructure of referral pathways
V1.1	14 September 2020	Tissue Viability Team	Review date extension	Extended review date from March 2019 to 31 December 2020
V2	24 <sup>th</sup> May 2021	Tissue Viability Team	Review and update for ratification	Front sheet amends and consultation table update
V3	January 2025	Tissue Viability Team	Review and update in line with national guidelines	Update and include National Wound Care Strategy Guidelines

#### **Consultation Table**

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or	Title	Date
group		
Tissue Viability Nurses	Specialist Nurses	January 2025
Pressure Ulcer Steering		January 2025
Group		
Suzanne Stone/John Payne	Heads of Nursing	January 2025
	Community Health	,
	Integrated Care	
CHIC	Divisional Governance IPR	March 2025

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

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#### 1. Introduction

In England, there is considerable variation in leg ulcer practice and outcomes which increases care costs and extends healing times (Gray et al., 2020). This unwarranted variation offers major opportunities to improve healing rates and reduce recurrence rates and thus reduce individual suffering, spend on inappropriate and ineffective treatments and the amount of clinical time spent on care

The annual cost to the NHS in the management of Chronic wounds is £8.3 billion. At least 28% of these wounds are leg ulcers (Guest et al., 2020), this equates to an estimated 739,000 leg ulcers in England with associated healthcare costs of an estimated £3.1 billion per year (NWCSP 2020)

Most leg ulceration occurs due to venous insufficiency for which there is robust evidence to support the use of compression therapy (Shi et al., 2021) and endovenous surgery (for superficial venous incompetence, Gohel et al., 2018) as first-line therapies to promote healing and prevent recurrence. Other causes of leg ulceration include peripheral arterial disease, reduced mobility and/or cardiac failure, with or without venous disorders NICE (2023).

Compression therapy remains the gold standard treatment. Recurrence rates within 3 months after healing can be as high as 70% (Franks et al., 2016). Recurrence rates of up to 44% can be reduced using graduated compression hosiery, compression wraps, leg elevation and strong social support in a reduction of skin breakdown (Finlayson, K et al., 2011).

Inadequate assessment and ineffective treatment may result in the persistence of ulcers for many years, some never healing. Guest et al., (2016) identified 30% of wounds lacked a diagnosis. There are psychological implications to the patient in that chronic leg ulcers disrupt people's lives leading to pain, social isolation and depression (Jones et al., 2008).

Quality of life is diminished; Life is complicated by pain, limited mobility, odour, depression and social isolation. Research tends to focus on wound care with little focus on its wider impact. Assessments tend to focus on physical and not include quality of life factors.

#### 2. Rationale

These guidelines provide a framework for the management of Lower Leg Ulceration. The guidelines are written in accordance with the National Wound Care Strategy Programme (NWCSP) Leg Ulcer Recommendations 2024 <u>Lower Limb | National Wound Care Strategy Programme:</u>

- To provide equitable care in line with agreed national standards of care, to follow a pathway, reduce reoccurrence, educate staff, patients and carers and achieve competencies.
- To support nurses in appropriate management of wounds in line with their professional codes. NMC: <u>The Code</u>: <u>Professional standards of practice and behaviour for nurses</u>, <u>midwives and nursing associates - The Nursing and Midwifery Council</u>
- To ensure that the patient is central to the decision making, regarding plan of care.
- To ensure that all healthcare professionals involved in the direct care of patients with leg ulceration use the East Sussex Healthcare Wound Management Pathway, incorporated within this document.
- To address the underlying causes of the leg ulcer.
- To consider all the other factors which may delay healing.
- To prevent avoidable complications.

It is paramount that underlying disease processes are addressed and stabilised to ensure maximum potential to heal.

#### 3. Scope

All ESHT adult patients presenting with lower limb wounds will be assessed within 2 weeks of onset in accordance with the National wound care strategy recommendations incorporated within this guideline.

#### 4. Definitions

#### Leg Ulcer

Leg ulcers are ulcers on the lower leg (originating on or above the malleolus and below the knee) that have not healed within 2 weeks (NWCSP 2024)



- A **leg ulcer originates above** the blue line.
- A foot ulcer originates below the blue line.

Many ulcers are multifactorial, having more than one underlying disease process causing or inhibiting healing, e.g. the patient may have venous incompetence and/or diabetes.

#### 5. Accountabilities

It is intended that the assessment should be carried out by a Health Care Professional (HCP) holding competencies in the theory and practice of the management of leg ulcers. (RCN 2006) Leg ulcer assessment is a highly complex skill; Practitioners must provide holistic care focusing on the patient as a whole to address underlying causes and not just focus on the wound. The trained Health care professional is accountable for the on-going care and monitoring of the patient's progress.

ESHT staff can access associated learning via ESHT online learning system: MYLearn

#### 6. Process

#### 6.1. Assessment

The information taken during the assessment should be recorded on a Leg Ulcer assessment document. In the community this is found on the 'Leg Ulcer assessment and monitoring form' (Currently V3) within Systmone. This must be completed fully on initial assessment for data collection purposes and measurement of clinical outcomes.

The relevant areas (Wound and skin assessments etc) should then be completed at least monthly to provide a record of the progress of the leg ulcer. Any unusual signs and symptoms should be recorded and the patient referred on, as guided in the wound management pathway.

The NWCSP advocate actions for 'immediate and necessary care' for all patients with a leg ulcer. It is recommended that if complete assessment cannot be undertaken ESHT staff should follow these guidelines (See Summary, Page 10)

**Acute Admissions** - For patients admitted to acute hospitals with leg ulceration, it is important that their leg ulcers are assessed within 24 hours of admission by the medical team caring for the patient following the Acute Leg ulcer/Cellulitis Pathway (Page 17). Inpatient staff should complete the wound assessment documentation.

#### 6.2. Doppler assessment

A Doppler assessment can be carried out as soon as possible after the initial presentation but must be carried out within 2 weeks, as this is sufficient time to ascertain that there is delayed healing requiring investigation.

Doppler Ultrasound / Ankle Brachial Pressure Index (ABPI) enables an objective measurement of the blood flow to the limbs to be made. It supports clinical findings and so aids the planning and implementing of a management regime. Doppler assessment is twofold, comprising of interpretation of both signals and pressure index (Worboys, 2006; NICE 2020). This diagnostic test compares the ankle systolic pressure to the brachial systolic pressure.

- Prior to the Doppler assessment, record results of peripheral pulse palpation. This should include posterior tibial, dorsalis pedis, peroneal, and anterior tibial pulses for both feet.
- Patients who have a normal arterial circulation will have an ankle systolic pressure that is the same as, or higher than, their brachial pressure. Ankle pressures lower than the brachial pressures are indicative of arterial disease.

These measurements need to be interpreted with caution in the diabetic patient. Full compression bandaging should not be applied until assessment and doppler ultrasound have been performed and the blood flow to the limb is confirmed as being sufficient. Neither should be used in isolation.

Peripheral Arterial Disease (PAD) occurs at an earlier age and progresses more rapidly in patients with diabetes, compared with patients without diabetes. There is a difference in the distribution of disease in the patients with diabetes. Distal vessels are more frequently involved in patients with diabetes. In patients without diabetes, the aorta, iliac and femoral arteries are more commonly affected. Changes often occur in the micro circulation, particularly thickening of the capillary basement membrane that influences blood flow. Other regulatory mechanisms controlling local blood flow are affected, therefore influencing perfusion of the tissues.

It is considered good practice to also assess whether the patient has any reduced peripheral sensation prior to applying compression bandaging. This should be recorded in the associated documentation.

 $\underline{\text{http://www.diabetes.org.uk/Documents/Guide\%20to\%20diabetes/monitoring/Touch-the-toes-test.0812.pdf}$ 

#### 6.3. National Wound Care Strategy Programme Recommendations

The NWCSP leg Ulcer recommendations reinforce the need for comprehensive assessment, so offer detailed guidance relating to:

- Identification & Immediate and necessary care
- · Assessment, Diagnosis and Treatment
- · Ongoing care of Leg ulceration
- Review of healing
- Care following healing

The complete guidance document can be found at: <a href="https://www.nwcsp-leg-ulcer-Recommendations-final-version-15.07.2024.pdf"><u>NWCSP-Leg-Ulcer-Recommendations-final-version-15.07.2024.pdf</u></a>

Below is a summary of 'Red Flag' symptoms/conditions for immediate escalation, and Leg Ulcer Recommendations Summary:

Immediately escalate to the relevant clinical specialist and/or service those with the following 'red flag' symptoms/conditions:

- Acute infection (e.g., increasing unilateral erythema, swelling, pain, pus, heat)
- Symptoms of Sepsis
- Acute or suspected chronic limb threatening Ischaemia (e.g., PAD in combination with rest pain, gangrene, or lower limb ulceration >2 weeks duration)
- Suspected Deep Vein Thrombosis
- Suspected skin Cancer
- Bleeding Varicose Veins





assessment to be comprehensive

adequate arterial supply:

For suspected venous disease with an

Provide verbal and written advice

lifestyle advice.

Offer appropriate nutritional and

with sufficient absorbency.

Apply a simple, low adherent dressing If needed, treat skin conditions and Clean wound and surrounding skin Offer analgesia if required. Treat any wound infection.

apply emollient.

and consider debridement, if required

Arrange for a

undertaken within 14 days

Treat any wound

Clean wound and intection.

surrounding skin and

Apply a simple, low



Identification & Immediate

and Necessary Care

Assessment, Diagnosis and Treatment

relevant clinical specialist those with the following red flag' symptoms/ mmediately escalate to the



Optimise management of contributing

- Acute infection Acute or suspected Symptoms of sepsis

chronic limb

- Suspected acute deep vein thrombosis threatening ischaemia
- Bleeding varicose veins Suspected skin cancer

Within 14 days, assess and identify contributing causes for non-healing and those causes. formulate a treatment plan to address

- Clean wound and required. Offer analgesia if
- if required. consider debridement surrounding skin and
- If needed, treat skin conditions and apply
- adherent dressing with Apply a simple, low emolient.
- Offer appropriate sufficient absorbency
- nutritional and lifestyle
- Provide verbal and advice.
- care. written advice about
- supported opportunities for incorporate Discuss and
- and adapt as ankle circumference compression, review If being treated with selt-management.

peripheral arterial disease only:

("mixed" disease or suspected

peripheral arterial disease For suspected venous disease and

Apply strong compression therapy

and intervention.

Refer to vascular services for diagnosis

deterioration. escalate if there is treatment plan and Review effectiveness of

# At each dressing change:

Leg Ulceration Ongoing Care of

# Review of Healing

Treat any wound Review for red flags

infection.

- Recording digital assessment.
- Measuring ankle circumference for previous images comparing with

If venous hypertension has

swelling. reduction in limb

treatment plan and

If there is ongoing venous

or no progress towards escalate if deteriorating Review effectiveness of

> therapy and review 6 monthly ongoing compression hypertension, encourage no longer be required compression therapy may venous interventions been resolved through

## At 12 weeks:

Monitor healing by

- Completing comprenensive
- comparing with Recording a digita image and reassessment.

previous images

Leg ulcers that remain Measuring ankle circumference for swelling reduction in limb

### concerned): (or more frequently, if At 4-weekly intervals

Monitor healing by:

- Completing ulcer
- image(s) and

## peripheral arterial disease: venous disease and For healed ulcers with

If the level of peripheral arterial and review 6 monthly. level of compression therapy the use of an appropriate disease permits, encourage

## peripheral arterial disease: For healed leg ulcers with

No further clinical care required recurrence of symptoms or clinical advice if there is but advise to seek immediate ulceration.

# or uncertain aetiology: For healed leg ulcers of other

symptoms or ulceration. No further clinical care there is recurrence of immediate clinical advice if required but advise to seek

line with local care escalated for advice in unhealed should be

# Following healing:

Care following Healing

## Provide contact details reduce the risk of

Offer advice on how to

# For healed **venous leg ulcers**

## supply: with an adequate arterial

# should any future issues arise

NWCSP Leg Ulcer

\*For full guidance, see the

Care should be delivered by a clinician

For lymphoedema:

with capabilities to manage lymphoedema.

Signpost to relevant,

high-quality information

mild graduated

compression.

For those without red

flag symptoms, offer sufficient absorbency. adherent dressing with Record digital image(s). apply emollient.

For other or uncertain aetiologies:

ABPI > 0.5 Refer to vascular services ABPI < 0.5 Refer urgently to vascular

appropriate

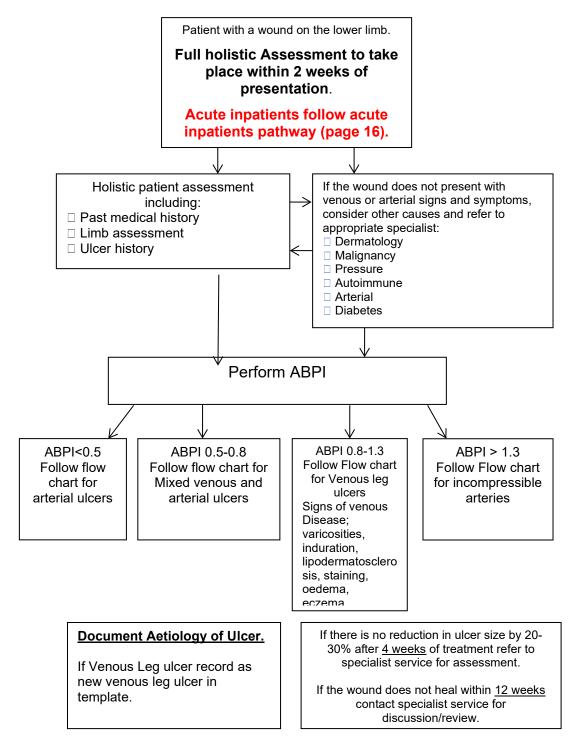
If ABPI > 0.8 consider use of strong Refer to appropriate service.

Recommendations.

#### 6.4. ESHT Lower limb management pathways

In line with the NWCSP leg ulcer recommendations the following Pathways have been devised to support staff ESHT staff in the decision-making process:

#### **6.4.1 Lower Limb Wound Management Pathway**



<sup>\*</sup>HCP may be the Practice Nurse, DN for housebound patients or other nurse in community setting

#### 6.4.2 Flow chart for Venous Ulcers

Signs of venous disease; varicosities, induration, lipodermatosclerosis, staining, oedema, eczema.

#### **Ankle Brachial Pressure**

#### **ABPI 0.8-1.3**

Normal Doppler Index with Triphasic and Biphasic sounds and no other significant arterial factors

Dress wound according to local wound formulary – where possible this should be a simple non adherent dressing

Apply full compression (40mmHg) at the ankle

Normal Doppler Index and Biphasic signals with one arterial factor indicating possible arterial component

Dress wound according to local wound formulary – where possible this should be a simple non adherent dressing

Reduced compression (20mmHg) or short stretch initially. Increase to full compression (40mmHg) if tolerated and closely monitored. If already in compression and its effective, don't stop treatment.

If oedema present, please ensure that the underlying cause of oedema is identified before treating i.e. Heart failure or Lymphoedema. Refer on to specialist services if appropriate.

If non-complex oedema present, then apply inelastic compression bandages. If no oedema present apply inelastic or elastic compression systems.

Consider use of compression wraps and compression hosiery kit.

Assess and manage pain control, if unmanaged refer to Pain Team via GP Assess underlying disease e.g. Diabetes, Rheumatoid Arthritis – refer if unstable Access Dermatology issues – refer to Tissue Viability service for advice Patient Education

Healed ulcers with skin changes

Prevent reoccurrence

Fit with appropriate compression hosiery

Refer to Vascular surgeon for assessment of veins for possible treatment.

Re assess treatment effectiveness and ulcer size at least every 4 weeks.

If the Ulcer is not reducing in size by 20-30% after 4 weeks of treatment or is deteriorating

Reassessment and re-Doppler ABPI

Refer to Specialist Nurse for further assessment.

If TVN plan in place and no improvement or deterioration noted re-refer for TVN review.

#### Flow chart for Mixed Venous and Arterial Ulcers

## Assessment including Ankle Brachial Pressure

**ABPI 0.5-0.8** 

Biphasic signal sounds significant arterial factors – Mixed venous/arterial ulcer

Appropriate dressing selection according to local formulary

No compression

Refer to Community TVNs

If already in reduced compression and its effective, don't stop treatment

All Monophasic signals and significant arterial components – Predominantly arterial ulcer

Appropriate dressing selection according to local formulary

No compression

Refer to Vascular Surgical service

If already in reduced compression and its effective, don't stop treatment

Following review and instigation of treatment plan.

Treatment plan may include reduced compression.
Re assess treatment effectiveness and ulcer size as directed by TVN or Vascular specialist.
If the Ulcer is not reducing in size by after 4 weeks of treatment or is deteriorating.

Reassessment and re-Doppler ABPI Refer to Specialist Nurse for further assessment.

If TVN plan in place and no improvement or deterioration noted re-refer for TVN review.

#### Flow chart for Arterial Ulcers

### Assessment indicating Arterial Components including Ankle Brachial Pressure

**ABPI < 0.5** 

#### **Urgent referral to Vascular Services**

Appropriate dressing selection from the wound formulary

Assess underlying disease e.g. Diabetes, Rheumatoid Arthritis – involve GP and make onward referrals if needed.

Assess and manage pain control or if unmanaged refer to Chronic Pain Team via GP.

Symptoms of Acute Limb Ischaemia;

Pain

Pallor

Pulseless

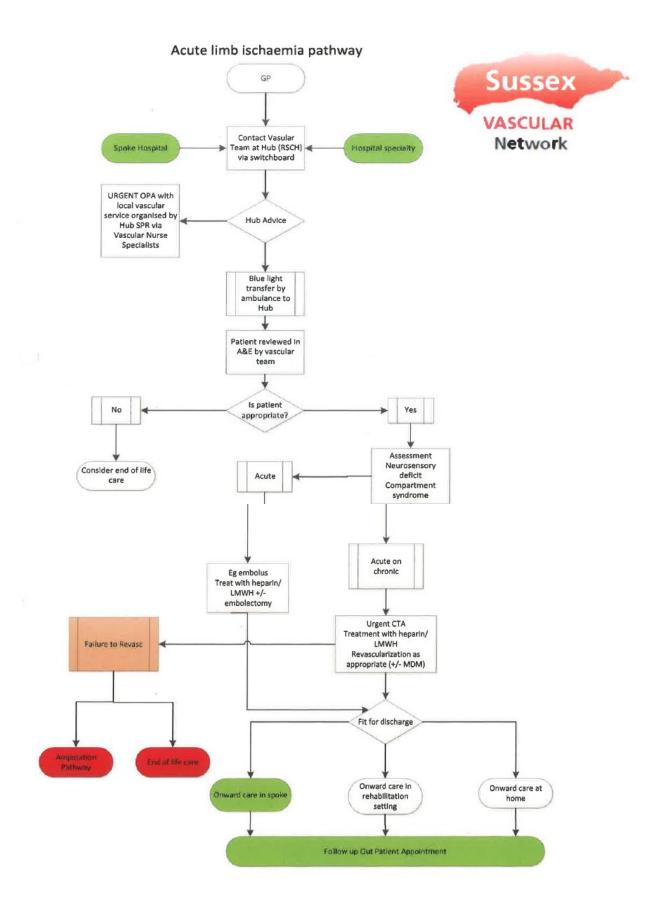
Paraesthesia

**Paralysis** 

Perishing Cold

Contact Vascular services may need emergency admission if these symptoms are present.

Follow Acute Limb Ischaemia Pathway (page 14) if suspected



#### Flow chart for Incompressible Arteries

### Assessment indicating Arterial Components including incompressible arteries

**ABPI >1.3** 

Refer to Vascular Services and/or Tissue Viability service for possible Toe Doppler.

Appropriate dressing selection according to wound formulary

Assess underlying disease e.g. Diabetes, Rheumatoid Arthritis – refer if unstable

Assess and manage pain control or if unmanaged refer to Chronic Pain Team via GP

If already in compression treatment and it is effective, don't stop treatment All Monophasic signals and significant arterial components – Predominantly arterial ulcer

Appropriate dressing selection according to local formulary

No compression

Refer to Vascular Surgical service

#### Acute Inpatients with leg ulceration/cellulitis

Tissue Viability do not routinely review leg ulcers/cellulitis.

Refer to Tissue Viability if after all the below has been completed and no Improvement seen after 2 Weeks.

For patients with arterial disease or diabetic foot wounds refer direct to vascular or diabetic foot teams.

A leg ulcer is a break in the skin below the knee which has not healed within 2 weeks (NICE Oct 2020).

Many ulcers are multifactorial, having more than one underlying disease process causing or inhibiting healing, i.e. the patient may have venous incompetence and/or diabetes.

#### On Admission:

- Remove all bandages including compression bandaging on admission to hospital.
- Any compression garments, i.e hosiery or wraps, should be kept with the patients' personal belongings.
- Assess leg ulcers and condition of the skin including heel, then document accurately using the wound care chart.
- Obtain wound swabs if indicated, and medical photos.
- Contact the community nursing team, practice nurse or nursing home to determine dressing regime already implemented.
- Continue with community dressing regime if dressings available (without compression if used) .

#### If unable to obtain community plan or dressings not available:

- 1. Strict skin care: wash legs with warm tap water and Dermol 500 lotion as soap substitute.
- 2. Moisturise skin with Dermol 500 or alternative emollient cream, or patient's own if available.
- 3. Apply Atrauman as primary dressing, and if wet add Zetuvit plus super-absorbent pad.
- 4. If ulcers are infected, obtain swab then apply Atrauman Ag or Cutimed Sorbact swab, if wet add Zetuvit plus super-absorbent pad.
- 5. Secure with toe to knee Eesigauz, Soffban and K-Lite bandage.
- 6. If legs very wet and oedematous or cellulitis high elevation of legs in bed, sitting out for meals/commode or mobilising only (**Do Not** use footstool as adds pressure to calf).

Compression bandaging will not be routinely reapplied for in-patients unless recommended and applied by TVN or vascular team.

#### 7. General Management

#### 7.1. Skin Hygiene

The aims of cleansing leg ulcers/legs are:

- To remove dry and flaky skin, especially when a bandaging system is in place.
- To remove the build-up of emollients/topical steroids.
- For patients' well-being and comfort.

Essential skin hygiene and cleansing of the ulcer at each dressing or bandage change should include soaking the leg for 10 minutes in a clean (plastic-lined) bucket/bowl of warm drinking quality water, with an emollient to promote a healthy skin. If patient has diabetic foot ulceration use Normal saline only to cleanse the foot/foot wound.

Dry scales should be removed from the legs particularly around the ulcer edge to allow new growth of epithelium (sterile single use forceps should be used).

A bland non-lanolin moisturiser should be applied to the legs after cleansing and drying. The emollient will help to form a waterproof barrier over the skin surface, which helps to prevent the water within the skin evaporating and keeps the underlying skin hydrated

All patients should be warned about the flammable nature of paraffin-based emollients and advised to stay away from naked flames.

#### 7.2. Wound care

Holistic wound assessment incorporating patient medical history and underlying conditions. Wound type, Tissue Type, Peri wound skin, exudate, odour, signs of infection.

Dressings do not heal leg ulcers but can be used to control symptoms such as odour or pain. They should be simple and cost effective; usually an Atrauman or similar is the initial dressing of choice: refer to the local Wound Dressing Formulary <a href="sussexformulary.nhs.uk/therapeutic-sections/appendix-2-wound-management-products-and-elasticated-garments/">sussexformulary.nhs.uk/therapeutic-sections/appendix-2-wound-management-products-and-elasticated-garments/</a>

#### 7.3. Sensitivities

HCPs should be aware that patients can become sensitised to elements of their treatment at any time. They should also be aware of common allergens in wound care products and minimise their use. Dressings need to be given time to work and if a specific dressing is not available a simple non-adherent dressing (i.e. Atrauman) should be used in its place.

When the lower limb is being treated for ulceration, 60% of these wounds have the potential to develop contact sensitivity. If persistent inflammation is confined to a well-demarcated area and does not respond to topical steroid therapy, contact sensitivity should be suspected and a Tubinet or Comfifast unbleached liner can be added.

#### 7.4. Managing Exudate

Patients who have heavily exuding legs may well experience exudate striking through the bandages daily or on alternate days initially. Patients should be reassured that the compression is working and that the leakage should reduce. Leave the bandages for as long as possible and supply the patients with large 20 x 40 cm dressing pads that can easily be wrapped around the outside of the bandage until the nurse comes the following day. Good skin care regime is important to ensure the exudate is removed as it can act as an irritant to

surrounding skin. A superabsorbent dressing could also be added short term to allow compression to stay in place longer and protect the surrounding skin. These dressings usually go directly on the ulcer or as a secondary dressing under the compression bandaging and do not need to be used once exudate is reduced. Advise the patient to elevate the legs above the hips in a reclining position as often as possible.

NB: Strikethrough of exudate should not be left uncovered as this provides a port of entry for bacteria

You should also check that you have achieved full compression where appropriate, as this will improve reduction of exudate. Remember to measure ankle after the padding to maximise the effect. If strike through continues exclude varicose eczema as the cause before referring to a specialist nurse. Further investigations and review of general health may be indicated to ascertain whether associated with exacerbation of a chronic condition, i.e. heart failure, or presentation of an acute condition.

#### 7.5. Wound swabbing and treatment of infection

When clinically assessing wounds, the practitioner should always be mindful of the presence of infection (White et al., 2011). Bacteria can usually be grown from a leg ulcer but in most circumstances they can be ignored as they do not interfere with healing. All broken areas of skin will rapidly become colonised with bacteria in any normal environment.

Routine bacteriological swabbing is unnecessary unless there is evidence of clinical infection such as cellulitis and systemic symptoms such as fever, malaise or raised neutrophils, white cells and CRP. Patients with immunological co-morbidities such as diabetes and those on immunosuppressive medication should be swabbed if infection is suspected.

The sepsis screening action tool should be utilised in accordance with suspected infection Adult-Sepsis-Screening-and-Action-Tool.pdf

#### 8. Associated issues

#### 8.1. Cellulitis

Cellulitis is an acute spreading bacterial infection of the subcutaneous tissue and mostly caused by Group A beta-haemolytic streptococci but can be caused by other bacteria such as Staphylococcus aureus.

Cellulitis is responsible for over 400,000 bed days per year, costing the NHS £96 million. (Levell et al., 2011). It is often misdiagnosed as lower limb dermatosis, commonly eczema, fungal infection, lymphoedema or chronic oedema.

Where cellulitis is present, individual assessment is required. Compression therapy, if in place should be stopped in the acute stages. Generally, the oedema and pain associated with cellulitis can be eased with high leg elevation. Daily monitoring is required to ensure the cellulitis is resolving.

In those patients that suffer recurrent cellulitis, compression hosiery can often prevent recurrence. Essential skin care should be maintained. For recurrent cellulitis it would be helpful to seek specialist nurse advice. Refer to the <a href="Antimicrobial Prescribing Policy for Adults">Antimicrobial Prescribing Policy for Adults</a> and <a href="Children">Children</a> for antibiotic treatment.

Following recovery from the acute phase of uncomplicated cases of cellulitis (no ulceration) consider class 2 below knee compression hosiery for 4-6 months after a comprehensive assessment (Linsay & Stephens, 2007).

#### 8.2. Deep Vein Thrombosis (DVT)

If a new episode of DVT is identified leave compression off until treatment has commenced and medical advice sought (see <u>Venous Thromboembolism Diagnosis</u>, <u>Treatment and Prevention Policy and Procedure</u>).

#### 8.3. Venous skin changes

- Varicose veins should be assessed when the patient is standing if possible.
- Haemosiderin consistently high venous pressures cause backflow damage to capillaries, causing escape of red blood cells, which contain "iron" which in turn stains the skin.
- Hyperkeratosis accumulation of flakes of skin in the epidermis as the dermis is waterlogged.
- Ankle flare tiny varicose veins on and around the ankle.
- Lipodermatosclerosis hard fibrous skin caused by damaged capillaries prevent any
  fluid being able to leak into the tissue typically seen with the thin ankle of
  "champagne legs" In the early stages it can be confused with cellulitis as it can
  initially be inflamed and painful.
- Atrophie Blanche which present as white areas of avascular tissue where capillaries have died as they unable to sustain the high pressures on them.
   Sometimes small red dots are visible within this tissue which are surviving capillaries.
- Varicose eczema is common and is caused by irritation from blood by-products under the skin when there is oedema present. This can also be confused with cellulitis, but it is always itchy, and the area is undefined, whereas cellulitis is painful and well defined. Varicose eczema can become infected by the patient scratching.
- Venous oedema swelling which usually reduces overnight if the patient sleeps in bed.
- Venous ulcers usually occur between the ankle and midcalf, are usually at least initially, superficial and have irregular edges and the exudate level is usually high.

#### 9. Compression therapy

The key to the successful healing of chronic venous ulcers is to correct the underlying venous hypertension using graduated compression therapy (EWMA, 2003; Moffatt 2007). Compression therapy is the gold standard treatment for uncomplicated venous leg ulcers and consists of long stretch elastic bandages, short stretch inelastic bandages, Ulcer hosiery kits, and compression garments. Each system has it merits. The choice is a decision the patient and the clinician should come to together, to help ensure concordance.

Mild compression systems (20mmHg & below) should be offered to all patients at their first assessment after ruling out any potential red flags (see page 8).

High compression systems (40mmHg) should only be applied after a full assessment and Doppler studies have been carried out. It is important that the science of bandaging is considered if safe and effective compression is to be delivered.

The application of high compression bandaging exerts pressure on the underlying skin and tissues reducing distension and pressure to the underlying superficial veins. This reduces oedema and increases the blood velocity in the deep veins, aiding venous return, thereby

counteracting venous hypertension. 40mmHg pressure at the ankle is considered the optimum pressure required to reverse venous hypertension, graduating the pressure to 17mmHg just below the knee (Moffatt, 2000).

#### 9.1. Types of Compression

Compression selection should be based on the following:

- · Leg ulcer aetiology e.g. venous versus mixed
- The amount of reduced arterial circulation to the limb
- Oedema of the limb
- General skin condition of the limb
- The patient's lifestyle i.e. does the patient's work; can they get their shoes on, how mobile are they?
- Can the patient share their care with the practitioner?
- Legs should be protected with a "wool" bandage especially on bony prominences.
- Bandages should be applied toe to knee to prevent oedema above and below where the bandage finishes
- All bandages should be applied as per the manufacturers' guidelines.
- Bandages for Venous leg ulcers should be 10cm and applied with a 50% overlap unless stated otherwise by the manufactures'

#### **Bandage Systems**

There are numerous bandage systems available but generally these can be separated into elastic and inelastic or combinations. The user must be aware of properties of the system and its safe application.

1: The 2-layer compression system - High compression (K-Two, Coban two)

This is a multilayer multi-component compression system, designed to ensure even distribution of pressure between two dynamic bandages. The system applies the effective therapeutic pressure required to treat venous leg ulcers and associated symptoms along with severe oedema in chronic venous insufficiency. Irrespective of leg shape the bandage system provides the correct level of pressure from the very first application due to its specific pressure indicator. The system consists of two separate dynamic bandages:

(1<sup>st</sup> layer) which is a composite layer formed of wading/foam (2<sup>nd</sup> layer) which is applied over the first layer, is a cohesive bandage.

High compression is not recommended when an ABPI is below 0.8, Two ankle sizes (18-25cm and 25-32cm) are available in some systems; 10 cm bandage width for leg ulcer management.

2: The Short Stretch Bandage System (Actico)

The short stretch bandaging system is a two-layer bandage system comprising of padding / reshaping layer and a compression layer.

The short stretch bandages extend and recoil very little, so when applied at full tension they maintain a semi-rigid cylinder around the leg that does not give when the muscle beneath expands. Contraction and expansion of the calf muscle against this cylinder re-directs the

energy, forcing it back into the leg to squeeze the veins, thereby promoting venous return. This creates a high 'working pressure'.

When the leg is inactive 'low resting pressures' are exerted on the leg. Because the bandages do not exert constant pressure on the limb, it may be useful for patients who do not tolerate compression well.

Layer 1 – Orthopaedic wool: The padding layer gives no compression. Its main functions are to protect bony prominences and other vulnerable areas, to act as an absorbent layer and reshape the limb.

Layer 2 – Short stretch bandage: The bandage is applied with even tension at full-stretch overlapping the bandage by 50% from the ankle to knee. If applying a second bandage (where the ankle circumference is greater than 25cm) apply ankle to knee in the opposite direction to the first bandage.

NB: The ankle circumference must be checked after the wool padding has been applied and the bandage regime determined by that measurement.

There are hosiery kits that give up to 40mmHg pressure at the ankle which may be an alternative for those patients with active ulceration and minimal exudate levels. They can also be used as prophylaxis on patients with healed ulcers who need to be maintained at 40mmHg.

#### Any new compression system applied must be reviewed within 24hours

#### **Compression Hosiery**

Recurrence rates post healing are 80% without hosiery and only 20% when hosiery is worn. Hosiery should be selected post healing with adequate compression to maintain healed skin and provide patient comfort. Tissue Viability Specialists can advise if it is unclear which hosiery to prescribe.

Patients should not be prescribed compression hosiery until their skin is sufficiently robust to enable the stocking to be drawn over the ulcer site. The restrictions regarding arterial disease and compression bandages also apply to the use of stockings.

There are various classification standards. Currently available on prescription are the British Standard (**BS**) or German/ European Standard (**RAL**). It is important to be aware that the compression rates and the stiffness of the fabric are different for each classification standard.

Hosiery is graded into three classes:

Class 1 BS – Light support that gives 14 – 17 mmHg pressure at the ankle

Class 1 RAL 18-21.1mmHg – Indicated for superficial or early varicose veins. Used as a treatment of reduced compression and in prevention of re-ulceration for people who cannot tolerate class II.

Class 2 or 2 BS – Moderate support that gives 18-25 mmHg pressure at the ankle.

Class 2 RAL 23-32mmHg – Indicated for varicose veins of medium severity, DVT treatment, and prevention of recurrence of venous ulceration for those who have healed in reduced compression or cannot tolerate class III.

**Class 3 BS** – Strong support that gives 25-35 mmHg pressure at the ankle.

Class 3 RAL 34-46mmHg – Indicated for severe varicose veins, treatment of venous ulceration when bandages cannot be tolerated and prevention of recurrence, and DVT treatment, recurrent and when flying.

Selection of the correct size of stocking is very important. The patient's legs must be carefully measured and ideally a class selected that will give the level of compression required preventing further venous ulceration. Made to measure stockings are available for those whose measurements fall more than 1cm outside the ranges catered for and patients with complex oedema.

It is essential that hosiery is fitted well, and the patients can manage either independently or with aid from relatives or carers. Measurement of legs should be when oedema is minimal, usually in the morning and fitting aids are available to help with application. It is important to follow patients up to ensure they are wearing their hosiery, as time and effort taken with this can make the difference between staying healed and a new episode of ulceration. Remember that for those patients who have difficulty either fitting or tolerating their hosiery a reduced compression is better than none.

If difficulties arise consider these options:

- Longer lengths of hosiery are available from some companies.
- Open toe hosiery may be more comfortable for some patients.
- Large arthritic knees: measure to mid-thigh as this will be far more comfortable.

#### **Compression Wrap Systems**

Compression wrap systems can be an alternative to compression bandaging systems to promote self-care and give users more control and input into their compression therapy.

They should be considered where oedema may be a factor so hosiery may not yet be a viable choice of compression system, but concordance and dressing continuity may be affected by a compression bandaging system.

They can be worn over dressings but if exudate levels are high may not be appropriate until exudate levels are decreased through using bandaging systems, elevation, medication is appropriate and appropriate dressings.

#### Compression evaluation

The following should be evaluated at the time of compressing the lower leg/s and at the next compression change and on-going at every compression change:

- The toes should be warm and pink
- There should be no pins and needles or tingling
- All digits should be able to move freely
- The compression should be of an even tension along the whole of the leg
- Was there any slippage of the bandage?
- Were there any signs of pressure damage or abrasions on removal of the bandage?
- Is the Leg Ulcer improving or deteriorating?
- Longer lengths of hosiery are available from some companies
- Open toe hosiery may be more comfortable for some patients
- Large arthritic knees, measure to mid-thigh as this will be far more comfortable

#### **Patient education**

- Promote patient understanding of their leg ulcer aetiology and treatment aims
- Provide NWCSP patient information leaflet: <a href="https://nwcsp-compression-PIS-28Mar23.pdf">nwcsp-compression-PIS-28Mar23.pdf</a>
- Concordance to be established with patient
- Skin care
- Over the counter preparations to be discouraged
- The prevention of accidental trauma, as far as possible, to the lower legs
- Seek expert advice as soon as possible for any breakdown in the skins integrity
- Encourage exercise/exercises.

#### 9.2. Troubleshooting compression

#### Bandage slippage

The rigid nature of short stretch bandages means that reduction in oedema sometimes allows bandages to slip down the leg initially and so they may need re-application. When applying any bandage regime ensure the gradient from ankle to calf is not too steep, the calf measurement should be 10-14cm larger than the ankle. Use the orthopaedic wool to pad out the ankle and improve the gradient. Try to ensure the limb has a good leg shape, use soft wadding layers (orthopaedic wool) to achieve this good shape.

#### Difficulty tolerating compression

If a patient expresses concern over tolerating compression bandages, it is worth considering applying the bandages as a reduced compression regime. It is essential to try and engage patients with compression by compromising. A reduced regime is better than none and often the level of compression can be increased gradually. Short stretch bandages produce low resting pressures and so may be better tolerated in some patients. Using liners and hosiery kit components are also a good way of playing with the compression levels to aid concordance.

Practitioners frequently report that patients do not adhere to compression therapy because of pain, despite them having adequate arterial circulation (Moffatt, 2004). The main factors causing pain in these circumstances are due to:

- Inappropriate choice of compression bandage system
- Lack of adequate padding over bony and tendinous areas
- Failure to adapt the bandage to the limb size and shape
- Over stretching bandages at calf level causing a tourniquet effect
- Over stretching bandages below knee
- Too many or too few layers of bandage causing a lack of graduation
- Pressure damage to the skin
- Bandage slippage causing trauma
- Over stretching of bandage causing joint or muscle or joint pain
- Inability to wear shoes
- Trauma from footwear over bandaging

#### Concordance

Compression therapy is the cornerstone of treatment for venous leg ulceration and furthermore there is increasing evidence that patients' quality of life is improved while receiving this treatment (Moffatt, 2000). These benefits are not always seen immediately, and it is vitally important the nurse spends time explaining to the patient the importance of

bandaging to wound healing. Also, discussing expectations will help understanding of the treatment.

Often the first few weeks can be difficult for patients, and they will need a lot of encouragement and support. Pain should be addressed immediately and reassessed at every bandage change. Building a rapport and getting the patient working with you is essential. Consider developing a contract between the patient and yourself. Tracings, measurements and photographs are an essential tool to monitor progress and are useful to demonstrate improvement to patients. Patient education leaflets should be used to reinforce advice.

Contact telephone numbers should be given to patients for both regular and out of hour's services so that they can contact a practitioner for advice. Over the counter topical preparations should be discouraged.

Utilise the Planning Care together policy in cases of non-concordance: <a href="https://doi.org/10.1016/journal.com/">01540 P.pdf</a> (esht.nhs.uk)

#### Pain

Health care professionals (HCPs) can overlook pain, although 80% of patients do experience pain from leg ulceration (Hollingworth, 2001). It is important to remember that pain is individual and that venous and arterial ulcers can be equally painful.

Knowing and understanding a patient's level of pain and type of pain is a vital element of leg ulcer assessment, on two counts. One, it will help the practitioner in making a diagnosis; and two, even moderate levels of continuous uncontrolled pain can significantly impact on a person's normal day—to-day activities work, rest, relationships and mental state — which in turn can delay leg ulcer healing.

Compression will improve pain over time for venous ulcers but sometimes pain levels can raise in the first few weeks, due to physiological changes in the central nervous system (Moffatt et al., 2007). Analgesia should be addressed at the start of treatment. The following factors should be considered:

- Be aware of triggers that increase pain
- Remember that careful explanation is required for all procedures
- Handle the wound as little as possible and with great care
- Recognise that pain may extend some distance from the ulcer
- Recognise that cleaning, soaking and the temperature of the water may exacerbate pain
- Avoid wound exposure, which may cause pain
- Review dressing choice
- Cover the wound with cling film if waiting for the wound to be seen by a colleague
- Avoid draughts from windows or fans as these may also exacerbate pain
- Involve the patient in the procedure-this gives them a greater sense of control and will help to reduce pain and anxiety
- Allow patients to remove their own dressings if they wish
- Allow patients to halt or slow down procedures
- Some patients have stated distraction through music and deep breathing helps pain reduction
- Reassess pain and analgesia often. Regular analgesia is better than ad hoc administration

#### **Footwear Problems**

Reducing layers of bandages can ease this problem depending on the individuals' requirements. A two-layer system may be appropriate using either short stretch or elastic bandages. Hosiery kits that provide 40mmHg pressure at the ankle are available, but this would only be suitable for ulcers that were minimally exuding. It is important to find an alternative rather than taking the compression off. Kerraped boot is now available on drug tariff and can last over 3 months, which are ideal for bulky dressings and bandages on the foot.

#### Nutrition

Nutrition is an essential element of wound healing and nutritional status is determined using the MUST score: see the <u>Clinical Nutrition Policy for Adults</u> and national guidelines at: <a href="http://www.bapen.org.uk/screening-for-malnutrition/must/introducing-must">http://www.bapen.org.uk/screening-for-malnutrition/must/introducing-must</a>

#### 10. Competencies & Training Requirements

Community health care professionals who manage patients with lower limb wounds must have completed Tier 1 and Tier 2 wound care modules via MYLearn. Staff training in doppler assessment skills and compression bandaging must be completed face to face and have competencies signed off (Appendix 1). In addition, they must attend ESHT leg ulcer training every 3 years.

Acute staff who manage patients with lower limb wounds to have completed Tier 1 wound management modules via MYLearn and have access to Acute lower limb face to face training.

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#### **12. Monitoring Arrangements**

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Reporting arrangements	Responsible individual/ group/ committee for acting on recommendations/action plan	Change in practice and lessons to be shared
Nursing Compliance with guidelines	Divisional Heads of Nursing	Lower limb CQUIN Audit ICB Dataset Submission	Quarterly  Monthly	Reported in divisional Integrated Performance Reviews (IPR)	Community Team Leads and Ward Matrons  Pressure Ulcer Steering Group  Wound Care Steering Group	Required changes to practice will be identified and actioned within a specific time frame.  A lead member of the team will be identified to take each change forward where appropriate.
Immediate escalation of non-trained staff management	Divisional Heads of Nursing/Teams leads community Ward matrons	Training records as mandatory requirement for all community staff managing pt with lower leg wounds	3 years	Reported in divisional Integrated Performance Reviews (IPR)	Community Team Leads and Ward Matrons	Required changes to practice will be identified and actioned within a specific time frame.  A lead member of the team will be identified to take each change forward
wounds	Train mail one	Training records for the mandatory tier 1 wound care training for acute staff	3 years	divisional Integrated Performance Reviews (IPR)		where appropriate.
National wound care strategy programme updated and new content	Tissue Viability Team	NWCSP website and publications Signed up as stakeholders	Monthly	Divisional reports into the Pressure Ulcer steering group and professional advisory group when appropriate	Tissue Viability Nurses Divisional Heads of Nursing	Required changes to practice will be identified and actioned within a specific time frame

#### Appendix A: Equality and Health Inequalities Impact Assessment (EHIA) template

Undertaking EHIA helps us to make sure that our services and polices do not inadvertently benefit some groups more than others, ensuring that we meet everyone's needs, and our legal and professional duties.

This is important because:

- Assessing the potential for services and policies to impact differently on some groups compared with others is a legal requirement.
- People who find it harder to access healthcare services are more likely to present later when their disease may be more progressed, have poorer outcomes from treatment, and need more services than other groups who have better access.

The Equality Act 2010 legally protects people from discrimination in the workplace and in wider society. It is against the law to discriminate against anyone because of:

- age
- gender reassignment
- being married or in a civil partnership
- being pregnant or on maternity leave
- disability
- race including colour, nationality, ethnic or national origin
- religion or belief
- sex
- sexual orientation.

These are called 'protected characteristics. The Act requires that public sector organizations meet specific equality duties in respect of these protected characteristics. This is known as the public sector equality duty.

#### **Public Sector Equality Duty**

Public bodies have to consider all individuals when carrying out their day-to-day work – in shaping policy, in delivering services and in relation to their own employees.

Public bodies must have due regard to the need to:

- eliminate discrimination
- advance equality of opportunity
- foster good relations.

#### **Armed Forces Covenant Duty**

The new Covenant Duty raises awareness of how Service life can impact on the Armed Forces community, and how disadvantages can arise due to Service when members of that community seek to access key local services. The Duty requires organisations to pay due regard to the Covenant principles when exercising functions in healthcare. "Due regard" means that we need to consciously consider the unique obligations and sacrifices made by the Armed Forces; that it is desirable to remove disadvantages faced by the Armed Forces community; and that special provision may be justified in some circumstances.

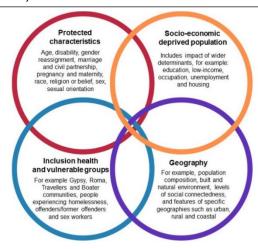
#### **Health Inequalities Duties- Equity for all**

In addition to our legal duties in relation to Protected Characteristics, the Health and Social Care Act and other legislation, NHS Planning Guidance and sector specific recommendations require the NHS to have regard to the need to address health inequalities (or differences in access to or outcomes from healthcare) and take specific action to address them.

Figure 1 shows the different population groups, factors associated with where we live, or our individual circumstances, which separately, or when combined, influence access to and outcomes from health care.

Getting equal outcomes may require different inputs (or services). In completing an EHIA its important to think about whether a one size fits all approach will generate the same good outcomes for everyone, or whether we might need to make some tweaks or adjustments to enable everyone to benefit equally. The health tree diagram shows that unless we think about the needs of different people, equal services might generate unequal outcomes.

Factors associated with poorer health outcomes (PHE 2021)<sup>1</sup>



The Health Tree<sup>1</sup>

The following principles, drawn from case law, explain what we must do to fulfil our duties under the Equality Act:

- **Knowledge:** everyone working for the Trust must be aware of our equality duties and apply them appropriately in their work.
- **Timeliness:** the duty applies at the time of considering policy options and/or <u>before</u> a final decision is taken not afterwards.
- **Real Consideration:** the duty must be an integral and rigorous part of your decision-making and influence the process.

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Health for all Blacker Blacker Blacker Equity

<sup>1</sup> https://www.researchgate.net/figure/Equality-and-equity-of-medical-resources-distribution\_fig2\_323266914

#### Doc ID #401 - Guideline for the Management of Lower Leg Ulceration

- Sufficient Information: you must assess what information you have and what is needed to give proper consideration.
- **No delegation:** the Trust is responsible for ensuring that any contracted services which provide services on our behalf can comply with the duty, are required in contracts to comply with it, and do comply in practice. It is a duty that cannot be delegated.
- Review: the equality duty is a continuing duty. It applies when a policy/process is developed/agreed, and when it is implemented/reviewed.
- Proper Record Keeping: to show that we have fulfilled our duties we must keep records of the process and the impacts identified.

NB: Filling out this EHIA in itself does not meet the requirements of the equality and health inequalities duties. All the requirements above must be fulfilled or the EHIA (and any decision based on it) may be open to challenge. Properly used, an EHIA can be a <u>tool</u> to help us comply with our equality and health inequalities duty and as a <u>record</u> that to demonstrate that we have done so. It is advised that you complete the short EHIA training session on MyLearn before completing this EHIA.

#### SECTION A ADMINISTRATIVE INFORMATION

This form is a central part of how the Trust makes sure and can demonstrate to others that we are meeting our legal duties; and how we can assure ourselves that all patients will get the best outcome for them from our services.

A completed copy of this form must be provided to the decision-makers in relation to your proposal. The decision-makers must consider the results of this assessment when they make their decision about your proposal. Function/policy/service name and number:	Guidelines for the management of lower leg ulceration		
Main aims and intended outcomes of the function/policy/service and summary of the changes you are making (if existing policy/service):	The guidelines provide a framework for the management of lower limb ulceration written in line with the national wound care strategy leg ulcer recommendations (2024) for all staff within ESHT managing lower lib wounds or involved in the commissioning of services		
How will the function/policy/service change be put into practice?	Will be an update on current guidelines on the management of the lower leg currently in use within ESHT Shared with CHIC division for ratification and available on extranet		
Who will be affected/benefit from the policy?	All patients and staff within ESHT that have a lower leg ulceration as clear and current guidelines will be available		
State type of policy/service	Policy x ?	Service 2	
	Business Case 2	Function 2	Existing
Is an EHIA required?	Yes x?		

#### Doc ID #401 - Guideline for the Management of Lower Leg Ulceration

NB :Most policies/functions will require an EA with few	No 🖸	
exceptions such as routine procedures	(If no state reasons)	
Accountable Director: (Job Title)		
	Tissue Viability Team Lead	
Assessment Carried out by:	Name:	
Contact Details:		
Date Completed:		
	13/01/25	

#### SECTION B ANALYSIS AND EVIDENCE

#### **Analysis of the potential impact – Equality and Health Inequalities Duties**

For this section you will need to think about all the different groups of people who are more likely to experience poorer access or have poorer outcomes from health and care services. For each group please describe in the first column the potential impact you have identified, in the second column explain how you have arrived at this conclusion and what information you used to identify the potential impact, and in the third column say what you are going to do to prevent it from happening, or which elements of a service or policy specifically address the potential impact. Key things to remember.

- Everyone has protected characteristics but some groups who share one or more protected characteristics may be more likely to have poorer outcomes or access compared with others and it is this potential that the EHIA process seeks to identify and address.
- The information included here should be proportionate to the type and size of the policy/service/change.
- An update to a policy should demonstrate that you have considered the potential for the policy to impact differently on different groups and taken steps to address that.
- A minor policy update is likely to need to be much less comprehensive than an EHIA for a major service change.
- You will need to know information about who uses or could use your service/policy will apply to (the population). You can use information about current patients or staff, and about the general population the Trust serves.
- 3. PROTECTED CHARACTERISTICS Main potential positive or negative impact of the proposal for protected characteristic groups summarised Please write in the box below a brief summary of the main potential impact (positive or negative) Please state N/A if your proposal will not impact adversely or positively on the protected characteristic groups listed below, but make sure you include information on how you know there will be no impact.

This policy is directed at our adult patient's population presenting with lower leg ulceration.

The Tissue viability service is not commissioned for under <18years of age.

Lower leg ulceration in children is not characteristically from venous or arterial disease as detailed in this policy, but possible trauma injury so would be referred direct to paediatrics services.

The ICB in Sussex have been piloting a lower limb service with lower limb clinics across Sussex and is an on-going 3 year project, This will address some of the issues with engagement with our population and potential impact on protected characteristics group. Some engagement with stakeholders has taken place

Protected characteristic groups	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Age: older people; middle years; early years; children and young people.	For patients over the age of 18 years	Lower leg ulceration in children is not characteristically from venous or arterial disease as detailed in this policy, but possible trauma injury so would be referred direct to paediatrics services.	Tissue viability services not commissioned for children and would be referred on to specialist children services
Disability: physical, sensory and learning impairment; mental health condition; longterm conditions.	No impact		

Protected characteristic groups	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Gender Reassignment and/or people who identify as Transgender	No Impact		
Marriage & Civil Partnership: people married or in a civil partnership.	No impact		
Pregnancy and Maternity: before and after childbirth and who are breastfeeding.	No Impact		
Race:	No Impact		
Religion and belief: people with different religions/faiths or beliefs, or none.	No impact		
Sex:	No impact		
Continued on next page			
Sexual orientation	No impact		
Veterans/Armed Forces Communities	No Impact		

#### 4. HEALTH INEQUALITIES -Potential positive or adverse impact for people who experience health inequalities summarised

Please briefly summarise the main potential impact (positive or negative) on people at particular risk of health inequalities (as listed below). If the policy/procedure is unrelated to patients, this section does not require completion.

Please state none if you have assessed that there is not an impact, but please make sure you complete the 'how do you know this' column to demonstrate that you have considered the potential for impact. If you identify the potential for impact for one or more of these groups please complete the full assessment in Appendix A

Groups who face health inequalities <sup>2</sup>	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
This includes all groups of			
people who may have poorer	Would require a GP and access to healthcare		
access to or outcomes from	Services		
healthcare services. It includes:			
People who have experienced the	Able to be signposted to services that will		
care system; carers; homeless	support 'wound care' via voluntary services in		
people; people involved in the	the 1 <sup>st</sup> instance		
criminal justice system; people who			
experience substance misuse or			
addiction; people who experience			
income or other deprivation; people			
with poor health literacy; people			
living in rural areas with limited			
access to services; refugees or			
asylum seekers; people in or who			
have been in the armed force;			

Page **34** of **45** 

Groups who face health inequalities <sup>2</sup>	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
other groups who you identify as potentially having poorer access and outcomes.			

#### SECTION C ENGAGEMENT

#### 5. Engagement and consultation

an x in the appropriate box below.

a. Talking to patients, families and local communities can be a rich source of information to inform health care services. If you are making substantial changes it's likely that you'll have to undertake specific engagement with patients. For smaller changes and policies your may have undertaken some engagement with patient groups, gained insight from routine sources e.g. patient surveys, PALS or Complaints information or information from Healthwatch, you may also have looked at relevant engagement that others have undertaken in the Trust, or locally

Have any engagement or consultative activities been undertaken that considered how to address equalities issues or reduce health inequalities? Please place

Yes	No x

b. If yes, please ensure all stakeholders are listed in the consultation table at the beginning of the policy.

#### **SECTION D SUMMARY OF FINDINGS**

Reflecting on all of the information included in your review-

6. EQUALITY DUTIES: Is your assessment that your proposal will support compliance with the Public Sector Equality Duty? Please add an x to the relevant box below.

	Tackling discrimination	Advancing equality of opportunity	Fostering good relations
The proposal will support?			
The proposal may support?			

Doc ID #401 - Guideline for the Managemer	nt of Lower Leg Ulceration			
Uncertain whether the proposal will supp	ort? x	Х	X	
Х	•		ducing health inequalities faced b	y patients? Please add an x t
	Reducing inequalities in access	ss to health care	Reducing inequalities in health ou	tcomes
The proposal will support?				
The proposal may support?	X			
Uncertain if the proposal will support?				
Key issue or question to be answered	Type of consultation, resea	rch or other evider	nce that would address the issue and	or answer the question
1				
2				
3				
9. EHIA sign-off: (this section mus	t be signed)			
Person completing the EHIA:				Date:13/1/25
	Suzanne Stone			

## Appendix A

Breakdown of Groups who are more likely to experience health inequalities:

Groups who face health inequalities <sup>3</sup>	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Looked after children and young people	Policy is for over 18 years		
Carers of patients	Require them to access a GP and the healthcare services		
Homeless people. People on the street; staying temporarily with friends /family; in hostels or B&Bs.	Require them to access a GP and the healthcare services		
People involved in the criminal justice system: offenders in prison/on probation, ex-offenders.	Require them to access a GP and the healthcare services		
People with addictions and/or substance misuse issues	Require them to access a GP and the healthcare services		
People or families on a low income	Require them to access a GP and the healthcare services		
People with poor literacy or health Literacy: (e.g. poor understanding of health services poor language skills).	Require them to access a GP and the healthcare services		
People living in deprived areas	Require them to access a GP and the healthcare services		
People living in remote, rural and island locations	Require them to access a GP and the healthcare services		

Doc ID #401 - Guideline for the Management of Lower Leg Ulceration

Groups who face health inequalities <sup>3</sup>	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Refugees, asylum seekers or	Require them to access a GP		
those experiencing modern	and the healthcare services		
slavery			
People who have served in	Require them to access a GP		
the Armed Forces	and the healthcare services		
Other groups experiencing	Require them to access a GP		
health inequalities (please	and the healthcare services		
describe)			

Appendix B – EHIA Resources

Sources of Information on the East Sussex population and sources of community or patient insight.

Population Data

State of the County 2021 Focus on East Sussex

East Sussex JSNA

**Community Insight** 

Further Reading on Equality and Health Inequalities

**Training** 

#### **Appendix B: Doppler Assessment**

Explain the procedure and reassure the patient. Ensure that he or she is lying flat and is comfortable, relaxed and rested with no pressure on the proximal vessels.

#### Procedure:

- a) The patient should lie as flat as possible and be allowed to relax for at least 15 minutes before any Doppler readings are taken to allow the blood pressure to equalise throughout the body. Any deviation from the patient lying flat should be recorded. The procedure can be explained and the patient history can be taken during this time.
- b) Using the appropriate Doppler probe instead of a stethoscope, record the brachial systolic pressure in both arms.
- c) Cover the ulcer with cling film and place the sphygmomanometer cuff around the leg just above the ankle. The sphygmomanometer bladder must circle two thirds of the leg. If it does not a larger / smaller cuff will be needed.
- d) Identify the dorsalis pedis, anterior tibial and posterior tibial pulses. Using plenty of ultrasound gel, locate the pulses with the Doppler probe and record the pressures on two of the pulses on each limb, even if only one limb is ulcerated.
- e) Note the quality of the pulses and what type of signal is heard; i.e. triphasic, biphasic, monophasic or muffled sounds. If all pulses are equal sound & strength, pump up on the posterior tibial artery and the dorsalis pedis pulses (record the peroneal artery pulse if one of these is not identified). Angle the Doppler probe at 45 degrees and move the probe to obtain the best signal. Avoid compressing the skin with the probe the contact should be made by the gel.
- f) Inflate the cuff until the signal is abolished then deflate the cuff slowly and record the pressure at which the signal returns, being careful not to remove the probe from the line of the artery
- g) Calculate the Ankle: Brachial Pressure Index (ABPI), by dividing the highest ankle pressure for that limb by the higher of the two brachial pressures.
- h) For the patient with diabetes ABPI needs to be interpreted with caution due to the risk of micro vascular and macro vascular circulation problems.

#### **Inaccuracies of Doppler reading**

Problems may arise if:

- a) The cuff is repeatedly inflated for long periods, this can cause ankle pressure to fall
- b) The cuff is not placed at the ankle, Ankle systolic pressure is not measured, pressure is recorded is usually higher than ankle pressure
- c) The pulse is irregular or the cuff is deflated too rapidly, The true systolic pressure may be missed
- d) The vessels are calcified (associated with diabetes), the legs are large, fatty or oedematous, the cuff size is too small, or the legs are dependent Inappropriate high reading will be obtained
- e) Central systolic pressure may influence the 'normal' range for the ABPI

#### What to do about the ABPI?

The ABPI cannot be taken alone as an indicator of the safety of applying compression bandaging. It is important to remember that other factors are involved as identified in the holistic assessment. Oedema and/or induration in the leg can give a false high reading because greater pressure is required to compress the artery under the accumulation of fluid in the limb. The ABPI may be within normal indices in some patients with a history of arterial disease e.g. history of intermittent claudication pain. These patients should be referred for a vascular opinion.

In patients with disease affecting their small blood vessels such as rheumatoid arthritis and diabetes, the large vessels may be patent giving a good ABPI, but there may be severely compromised blood flow in the micro-vessels.

Patients with calcified arteries, common in diabetes, the blood vessels will be very difficult to compress with the sphygmomanometer cuff, and therefore, artificially high ABPI's will be obtained. TBPI (toe pressures) may be indicated, which will give a more accurate result in some conditions.

If there is any doubt as to the significance of the Doppler readings consult a Tissue Viability Nurse Specialist or Vascular Nurse Specialist.

#### **Frequency of Doppler Assessments**

All patients with an open ulcer in compression bandages and healing should have their ABPI recorded every 3-6 months. Patients whose ulcers are static should be reassessed within 3 months.

Patients whose ulcers or symptoms are deteriorating; or patients who develop a new area of ulceration or pain need an urgent Doppler reassessment.

Once patients have healed and are fitted with compression hosiery they should be asked to return for reassessment if they have any discomfort or deterioration in the general condition of their legs.

Advice about signs and symptoms to look out for should be given. If patients have significant risk factors, they should be monitored. Reassessment of hosiery and repeat ABPI should be recoded every 9-12 months.

Patients who develop a new ulceration or pain also need to be urgently Doppler assessment. The patients that may fall into this group include:

- Diabetics
- Abnormal ABPI on initial assessment
- Mixed Aetiology
- Significant systolic difference between pedal pulses

Once patients have healed and are fitted with compression hosiery they should be asked to return for reassessment if they have any discomfort or deterioration in the general condition of their legs. Advice about signs and symptoms to look out for should be given. If patients have significant risk factors, they should be monitored.

#### **Appendix C: Competencies**

# **Practical Assessment of Doppler Ultrasound**

Practical skill	Demonstrates Theoretical Understanding, Date achieved and signed	Demonstrates Practical Application Date achieved and signed
Lies patient flat or raises the legs to the level of the heart if unable to rest supine. Acknowledges that patient should be rested for 15 minutes and effects of the immediate environment on the procedure		
Is aware of the need to select appropriate size cuff		
Palpates pulses prior to appropriate of correct ultrasound transmission get		
Adequately identifies the brachial systolic pressure and is aware that both arms are assessed in the clinical situation		
Places the appropriate size cuff around the ankle No more than 2 cm above of the malleoli Uses adequate application of ultrasound gel and		
Suitable probe  Accurately identifies all pulses, measures the		
ankle systolic pressure using at least two pulses on each foot		
Accurately calculates the ankle Brachial Pressure Index using a calculator		
Understands the criteria for referral for a vascular or other specialist opinion		
<u>Knowledge</u>		
Covers the wound with suitable dressing/film Understands the significance of the Triphasic/biphasic/monophasic signal quality		
Understands that Doppler is used to exclude arterial disease rather than a diagnosis for venous disease		
Makes an appropriate decision about suitability of compression bandaging in relation to holistic assessment including ankle circumference and leg shape		
Understands criteria for referral for a medical opinion		
Understands contraindications for use of Doppler ultrasound		
Accurate interpretation and significance of signals and results.		

# **Practical Assessment of Short Stretch Bandaging**

Practical skill	Demonstrates Theoretical Understanding, Date achieved and signed	Demonstrates Practical Application Date achieved and signed
Full assessment –use "Local" assessment form		<u> </u>
Doppler>0.8-<1.2- refer to Trust guidelines		
Examine shape of leg – "Extra" padding for		
protection or re-shaping can be applied first, eg		
Strip down the tibial crest if required. Position foot		
Correctly. Graduation – aiming to achieve twice as		
Much compression at ankle as knee.		
Position self and patient in appropriate way for		
Comfort and health and safety		
Protects the bony prominences/fragile skin		
Measures the ankle circumference and uses:		
<ul> <li>Extra padding if below 18cm</li> </ul>		
<ul> <li>2 bandages if above 25cm – reverse spiral</li> </ul>		
Ensures the foot is at 90 degree angle and		
Understands the rationale		
Applies bandage according to manufacturers		
Instructions		
Holding bandage close to leg applies at 100%		
Stretch with 50% overlap		
Finishes bandaging approximately the width of two		
Fingers below the knee		
Checks that the bandage is comfortable,		
Understands when to recheck and the rational		
Supplies appropriate advice and contact telephone		
numbers		
Achieve 40 mm Hg at ankle		
Discuss patient information and health promotion		
that should be considered when treating patients		
with leg ulceration		
Knowledge		
Ability to recognise possible consequences of		
Inappropriate application of compression bandage.		
Demonstrate LaPlaces Law		
Patient has demonstrated understanding of		
Treatment and concordance		

# Performance and Knowledge of Leg Ulcer Assessment

Knowledge and performance	Demonstrates Theoretical Understanding, Date achieved and signed	Demonstrates Practical Application Date achieved and signed
Communicates with individuals and carers in a manner which encourages an open exchange of views and information whilst treating them with dignity and respect		
Demonstrate the individual understands the intended assessment and is fully informed and has capacity to give consent. Consent is recorded accurately		
Demonstrate understanding and knowledge of what constitutes a comprehensive holistic assessment. Including history taking, physical assessment, signs and symptoms of common aetiologies and importance of diagnosis.		
Formulation of appropriate treatment plans and reviews. Shows understanding of who to refer to if ulcer fails to improve/heal.		
Provides appropriate management to the ulcer site and surrounding skin		
Demonstrates accurate application of compression with each layer applied		
Understands the range of compression bandaging Available and why compression is used for venous ulceration		
Achieves appropriate and accurate graduated compression therapy		
Develops strategies for managing potential problems in negotiation with the patient		
Correctly documents management system used		
Implements an appropriate management strategy for the patient and healthcare teams		

# Assessment of Competence for K Two Compression Bandaging for Venous Leg Ulceration

	UNDERPINNING THEORY	Details of assessment and experience	Date achieved	Signature of Assessor/Practitioner
1	Discuss the theory underpinning the mechanism of compression bandaging			
2	Discuss the rationale for the appropriate & safe use of compression bandaging			
3	Discuss the application, limitations and contraindications for the use of compression bandaging			
4	Demonstrate an understanding of how to acquire the appropriate equipment required to initiate compression bandaging			
	SKILL REQUIREMENTS	Details of assessment and experience	Date achieved	Signature of Assessor/practitioner
1	Discuss and demonstrate the role of patient education and information to ensure they understand & are concordant with compression bandaging (& can give informed consent)			
2	Demonstrate the ability to undertake patient/wound assessments (as part of a holistic approach to care) according to Trust guidance			
3	Record the wound assessment using an appropriate tool			
4	Demonstrate the ability to safely apply K Two compression bandaging as per manufacturer's instructions			
5	Demonstrate the ability to provide holistic care for the patient whilst receiving this therapy			
6.	Discuss the identification & reporting of adverse events			

I declare that I have expanded and actions.	my knowledge and skills and undertake to practice with accountability for my decisions
	protocol for the use of K Two compression bandage therapy in venous leg ulceration
Signature of Practitioner:	Date:
I declare that I have supervised	this practitioner and found her/him to be competent as judged by the above criteria.
Signature of Supervisor:	Date:
•	placed in the practitioners' personal file and retained by the individual for their
Professional Portfolio	

# **Practical Assessment of Compression Hosiery**

<u>Practical skill</u>	Demonstrates Theoretical Understanding, Date achieved and signed	Demonstrates Practical Application Date achieved and signed
Full holistic assessment – use Trust guidelines		
Checks patient's understanding of the need to maintain compression therapy following ulcer healing		
Explains procedure, measures both legs. Explains when this would be carried out.		
Identifies suitable stock size or need for made to measure hosiery. Explains rationale for choice of hosiery class		
Explains range of hosiery available, provides Guidance on patient's choice to achieve Concordance- e.g. flat knit and circular bed.		
Demonstrates fitting hosiery manually and using Aids where appropriate to patient and/or carer		
Supervises patient applying and removal hosiery		
Ensures patient has contact telephone numbers And understands the importance of reporting any problems immediately.		
Explain the need for reassessment and hosiery Replacement six monthly or sooner if problems Occur.		
Referral to vascular consultant where appropriate		
<u>Knowledge</u>		
Care of hosiery – washing and drying		
Skin care regime – discussed with patient		

I declare that I have expanded my knowledge and skills and underta	ke to practice with accountability for my decisions
and actions.	
I have read and understood the protocol for the use of K Two compr	
Signature of Practitioner:	Date:
I declare that I have supervised this practitioner and found her/him to	be competent as judged by the above criteria.
Signature of Supervisor:	Date:
Copies of this record should be placed in the practitioners' personal	
Professional Portfolio	the and retained by the individual for their
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# Pressure Ulcer Prevention and Management Policy

Document ID Number:	1108
Version:	V4
Ratified by:	Clinical Documentation and Policy Group
Date ratified:	10 May 2022
Name of author and title:	
Date originally written:	October 2011
Date current version was completed:	April 2022
Name of responsible committee/individual:	Pressure Ulcer Steering Group (PUSG)
Date issued:	17 June 2022
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Target audience:	All clinical staff
Compliance with CQC Fundamental Standards	Person-centred care, Dignity and respect, Consent, Safety, Safeguarding from abuse, Food and drink, Premises and equipment, Duty of candour,
Compliance with any other external requirements (e.g. Information Governance)	NHSI Pressure ulcers: revised definition and measurement framework
Associated Documents:	Duty of Candour

Did you print this yourself?

Please be advised the Trust discourages retention of hard copies of the policies and can only guarantee that the policy on the Trust website is the most up to date version

This guidance does not override the individual responsibility of health professionals to make appropriate decisions according to the circumstances of the individual patient in consultation with the patient and or/carer. Health care professionals must be prepared to justify any deviation from this guidance.

### **Version Control Table**

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1.0 2012103	October 2011		Tissue Viability Clinical Nurse Specialists  Vascular Nurse Specialist	Previous Community Policy and Acute Trust policy merged
V1.1 2012163	May 2012	As above	Updated document published on 21/4/12 Achieving Consensus in Pressure Ulcer Reporting Amendments To above and consistency in	Updated reference page 24 Amendment to pages re ungradeable to unstageable page 20 Page 12 Mattress type Page 17, 19, 20,
V1.2 2012299	October 2012		text  Referral and Incident Form changed. Given Chair Approval.	21 and Appendix 4 & 7 Referral updated to include TVN's alerted to grade 2 Pressure Ulcers. Updated
V1.3	May 2013	As above	Up-dated Documentation	Incident Form
V2	JUNE 2015	As above	Up-dated Documentation	Purpose T SSKIN
V2.1	April 2016	As above	Up-dated reporting process	New appendices and p 13 section 5.6 amendment
V2.2	March 2017	As above, change made by	Revised governance process	Proof read and minor amendment to section 5.6.
V3	April 2019		Updated in line with NHSI Definition and Reporting Framework (2018)and locally agreed processes	Complete review in line with NHSI Recommendati ons and change in local processes.

V4	April 2022		Update in line with revised governance process	Updates to all sections and additional appendices added.
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#### **Consultation Table**

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
Tissue Viability Service	Tissue Viability Nurses	January 2022
Pressure Ulcer Review Group	PURG	January 2022
Documentation/Ratification	ESHT	Oct 2015
group		

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

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#### 1. Introduction

East Sussex Healthcare NHS Trust (ESHT) ambition is to reduce preventable pressure ulcers. The revised guideline aims to promote an interdisciplinary and patient/carer focused approach to the challenges of preventing pressure ulcers and to ensure a cultural shift towards the prevention and management of pressure ulcers within the Trust. It commits the Trust to ensuring that there are effective arrangements for pressure ulcer prevention and management.

Guidance aims to ensure all individuals from first episode of care, throughout inpatient stay and on transferring to the community, receive consistent risk assessments (Appendix 3 for Maternity and Appendix 4 for Paediatrics), with timely interventions to minimize risks to prevent pressure ulcer incidents or extension of existing pressure injury (EPUAP 2018).

Locally ESHT have been members of the National NHSI Collaborative which aims to usequality improvement methodology to improve the care we provide to prevent pressure ulceration.

In June 2018, NHSI published some recommendations in relation to definition, reporting, defining and measuring pressure ulcers. The majority of these recommendations have been—taken up by ESHT and some local amendments have been made to how we code pressure—ulcer incidents (Appendix 5). The Tissue viability Team are stakeholders in the National—Wound Care Strategy Programme, one of the areas is working on Pressure Ulcer Prevention, and Professional Core Skill competencies Wound-Care-Framework-2021.pdf (skillsforhealth.org.uk)

#### 2. Purpose

#### 2.1 Rationale

To provide information and guidance to ESHT staff to ensure consistent and safe approach to the prevention and management of pressure damage within our care.

Pressure ulcers remain a concern represent harm associated with healthcare delivery. In the NHS in England, 24,674 patients1 were reported to have developed a new pressure ulcer between April 2015 and March 2016, and treating pressure damage costs the NHS more than £3.8 million every day. Finding ways to improve the prevention of pressure damage is therefore a priority for policy-makers, managers and practitioners alike. (NHSI 2018)

#### 2.2 Principles

The wound care strategy focuses on patient safety, patient experience and effectiveness of care. Therefore, the occurrence of pressure ulceration is used to assess the quality of care delivered by a healthcare organisation and the effectiveness of the preventative measures taken.

This emphasizes the importance of health care teams focusing on preventative measures to minimize individual pressure ulcer risks, reduce pain and infection risk, improving safety, quality, dignity and compassion in care (Griffiths et al. 2008; DH 2009c; Care Quality Commission. 2010). Pressure area care, infection prevention and pain were identified as key general nursing care indicators (Hinchliffe. 2009).

Pressure ulcer incidence and prevalence is one key quality care indicator which aims to generate meaningful information to motivate and enable changes in practice leading to improved outcomes for patients (White et al. 2010).

The older person may have one or more chronic diseases on admission to hospital and also in the community setting. These risk factors as well as a growth in the bariatric population impact on nursing dependency and patients' vulnerability to develop pressure ulcers particularly during acute illness and upon recovery.

#### 2.3 Scope

All healthcare ESHT professionals who have direct patient contact and/or make decisions concerning treatment of individuals who may be vulnerable to developing pressure ulcers, including:

 Multidisciplinary Team: Clinical and Business Managers: Clinical Governance and Education Leads

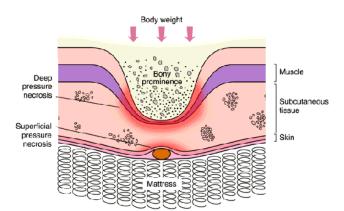
#### 3. Definitions

#### 3.1 Pressure ulcer

A pressure ulcer is defined as a localised injury to the skin and/or underlying tissue usually over a bony prominence (or related to a medical or other device), resulting from sustained pressure (including pressure associated with shear). The damage can be present as intact skin or an open ulcer and may be painful (NHS improvement 2018)

A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated (European Pressure Ulcer Advisory Panel - EPUAP and National Pressure Ulcer Advisory Panel - NPUAP- 2018).

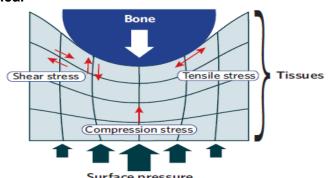
#### **Pressure**



Body weight can squash and rupture skin and muscle layers and occlude blood capillaries supplying the area leading to tissue death

- Force applied perpendicular to the skin
- Compression of tissue, and disruption to local blood supply
- Tissue distortion resulting in shear near the bony prominence
- Occur with short durations of high level pressure, and with long durations of low level pressure

#### 3.2 Shear

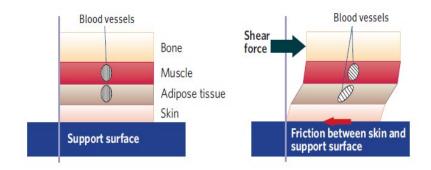


Pressure applied to the skin over a bony prominence causes compression, deformation and distortion of the underlying soft tissues and produces shear within and between tissue layers

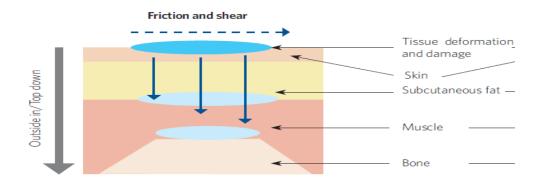
Shear stress caused by exposure of skin to tangential force, resulting in one layer of tissue moving relative to the other, causing the tissues to stretch, rupturing the capillary blood vessels with local tissue loss .Shear stress also caused by pressure related tissue distortion

Commonly occurs in combination with pressure when patients slide down the chair or bed or if the patient is dragged back up the bed. The outer skin fixes against the support surface but shear forces within deeper layers twist and contort tiny capillaries and force inner tissue layers to move against bone causing separation of the skin layers.

When a patient is in contact with a support surface that moves, the friction between the skin and the surface tends to hold the skin in place and a shear force occurs that displaces and deforms the tissues, and may distort and compress blood vessels



Friction and Shear at the surface of the skin contribute to development of superficial pressure ulcers. Develop 'outside in', similar to a pothole in the road



#### 3.3 Moisture

Moisture damage may occur through unmanaged incontinence, sweat, and exudate. Excessive moisture increases friction and shear forces, and causes maceration, making skin more vulnerable to the effect of shear stresses. Also excessive dryness makes the skin more vulnerable to shear stresses

Perspiration with pyrexia or urinary/faecal incontinence in contact with unprotected skin can remove its protective acid microbial barrier leading to excoriation and moisture associated skin damage (MASD). A MASD will be especially vulnerable to develop deeper injury from any friction, shear and/or pressure forces.

#### 3.4 Categories

All pressure ulcers should be categorised 1 - 4 according to European consensus on classification (2018) <a href="www.epuap.org">www.epuap.org</a>. NPUAP/EPUAP 2018 also recognise that patients may present with unstageable pressure ulcers where the depth of damage is unknown or damage that presents as localised purple bruising with potential for deep tissue injury (DTI). Evolution in both cases may be rapid exposing additional layers of tissue even with optimal treatment.

Categorizing pressure ulcers requires a clear understanding of the anatomy of the skin in different locations. Staff must take part in appropriate learning and practice activities that maintain and develop competence and performance (NMC 2018).

Pressure ulcers should not be reverse categorised. For example a category 4 pressure ulcer does not become a category 2. It should be described as a healing category 4 pressure ulcer (EPUAP 2018). ESHT do not report category 1 pressure ulcers

# **EPAUP Pressure ulcer categorisation chart Definition**

A pressure ulcer is defined as a localised injury to the skin and/or underlying tissue usually over a bony prominence (or related to a medical or other device), resulting from sustained pressure (including pressure associated with shear).

<b>'</b>	,				
The damage can be present as intact skin or an open ulcer and may be painful (NHSI 2018)					
Category 1	Intact skin with non-blanchable redness, usually over a bony prominence. Not visible in dark skin. Area may be painful, firm, soft, and warmer or cooler compared to adjacent skin. Act promptly to prevent deeper damage	NUTURNAL MACKET AND STAGE 1			
Category 2	Partial thickness loss of dermis presenting as a shallow ulcer with a red/pink wound bed, without slough. May also be intact or open/ruptured serum-filled or sero-sanguinous filled blister. Shiny or dry shallow ulcer without slough or bruising. Not skin tears, tape burns, incontinence associated dermatitis, maceration or excoriation	WHENE WAS AND A STAGE 2			

Category 3	Full thickness skin loss. Subcutaneous fat may be visible but bone, tendon or muscles are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunnelling.  Can be shallow or very deep, depth varies by anatomical location/ amount of subcutaneous tissue.	NATIONAL PRISONEL ADJOINT ADJO
Category 4	Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present. Often undermining and tunnelling. Depth varies by anatomical location.  Can extend into muscle/ supporting structure making osteomyelitis likely to occur.	Stage 4 Pressure Injury  White the state of
Unstageable	Full thickness tissue loss in which actual depth of the ulcer is completely obscured by slough (yellow, tan, grey, green, brown, black, eschar) in the wound bed. Until enough slough is removed to expose the base of the wound, the true depth cannot be determined.	Unstageable Pressure Injury - Slough and Eschar
Deep tissue Injury	Purple or maroon localized area of discoloured intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.  Deep tissue injury may be difficult to detect in individuals with dark skin tones.	Deep Tissue Pressure Injury  William Control (1988)
Medical Device Pressure Ulcer	A pressure ulcer that has developed due to the presence of a medical device.  Result from use of devices designed and applied for diagnostic or therapeutic purposes.  Reportable under the Category of Pressure ulcer with medical device (d) as additional information (NHS I 2018)	Used with permission NPUAP
MASD – Moisture associated skin damage	Moisture associated skin damage- Skin damage cause by sustained moisture rather than pressure e.g. incontinence, wound exudate, perspiration. Includes intertriginous dermatitis , peri-wound & peristomal moisture-associated dermatitis	

#### 4. Accountabilities and Responsibilities

All health care professionals should be knowledgeable of current guidelines and reporting procedures and competent with preventative interventions in order to minimize the risks to patients coming into East Sussex Healthcare NHS Trust.

- All ESHT clinical staff should attend Pressure Ulcer Prevention training on induction and as agreed in their PDR. Training accessed online via MYLearn
- All category 2, 3, 4, unstageable, DTI and Medical Related Device pressure ulcers must be reported via DatixWEB (see section 6). Cat 3, 4 pressure ulcers and DTIs will be investigated using the Pressure Ulcer Root Cause Analysis (PU RCA) form (Appendix 7)
- Early identification and on-going pressure ulcer risk assessments are the responsibility of all healthcare professionals using both clinical judgement and PURPOSE T2.

#### 5. Procedures and Actions to Follow

#### 5.1 Identifying Pressure Damage

All healthcare staff should be aware of the following signs, which may indicate pressure ulcer development:

- Persistent erythema (superficial reddening of the skin)
- previously identified as non-blanching erythema (i.e. red skin that does not turn white on light finger pressure applied for 3 – 5 seconds)
- Blisters
- Discoloration
- Localised warmth or coolness, soft or hard tissue usually over bone compared to adjacent skin.
- Purplish/bluish localised areas of skin
- Change in temperature
- Change in texture
- Pain may be a sign of pressure injury for some individuals.

Please be aware that in dark skin tones erythema may not be so evident

#### **Skin Tone in Pressure Ulcers and wounds**

It has been acknowledged that skin tone variance may affect presentation of early-stage pressure Ulcers (NPUAP 2018) as many signs and symptoms that clinicians have been educated to look for may present differently depending on the patient's skin type. It is important to note that lack of early identification of skin changes can mean that important signs are missed.

Dark skin tones very rarely show the blanching process we are trained to look for, and erythema may be hard to detect. The term 'redness' itself can be misleading as colour changes run the spectrum of pink, red and purple.

A skin inspection with an awareness of skin tone should be carried out as part of a full holistic assessment. This should incorporate overall health and medical history, their skin, and wound if present. Changes in skin colouration are often the main signs, comparing the affected area with unaffected skin. It is important to note that patients with all skin tones should receive an equitable level of assessment.

It is also important that touch is also used in the skin assessment and factors beyond the appearance/baseline tone of the skin are considered. The different anatomical locations are a

specific challenge as skin tone may vary in different locations. An example on the heel, noting that in patients with dark skin the soles of the feet are much lighter.

Once skin is breached, skin tone no longer affects assessment of the wound tissues due to the location of melanin, but assessment of peri-wound skin remains important.

The language and terminology can be challenging for the clinician if they find skin tone 'difficult' or 'awkward' in fear of causing offence. It is therefore important to remember in wound care the skin tone is separate from race e.g. not all people classified as black have dark skin tone.

The term skin tone should be used, it is also preferable to use terms not centring on 'light skin' as the norm or baseline. An example saying 'dark skin tone' rather than 'darker' or 'non-white'

The Wounds UK Best Practice Statement: Addressing skin tone bias in wound care - Assessing signs and symptoms in people with dark skin tones (Wounds UK 2021) is an excellent resource: <u>Best-Practice-Statement-Addressing-skin-tone-bias-in-wound-care-assessing-signs-and-symptoms-in-people-with-dark-skin-tones.pdf</u> (esht.nhs.uk)

#### Deep tissue injury is a unique form of Pressure ulcer and not always evident for several days.

The European Pressure Ulcer Advisory Panel defines a deep tissue injury as 'a pressure related injury to subcutaneous tissue under intact skin. Initially these lesions have the appearance of a deep bruise'. Deep tissue injury can result as a consequence of direct pressure and/or internal shearing. It is crucial to take an accurate patient history to determine whether deep tissue injury should be suspected

#### An example:

- On admission to hospital a patient may present with persistent non-blanching redness/erythema, Category 1 pressure ulceration.
- Several days later the area appears to be deteriorating despite appropriate pressure area care. On review of patient notes the patient had collapsed at home, and found by carers the next day lying on the bathroom floor, length of time on floor unclear.
- The problem with these lesions is that they may not be readily apparent on initial assessment however; these lesions may result in Category 3 or 4 pressure ulcers, even with optimum treatment.

#### 5.2 Groups at Risk

Pressure ulcers are more likely to occur in those who are/have:

- Known or scarring from previous pressure ulcer
- Acutely ill
- Neurologically compromised
- Reduced mobility or increased movement i.e. Parkinson's
- Patient following falls or long lie or at risk of a Deep Tissue Injury
- Incontinence/moisture
- Impaired nutrition
- Patients without fully completed risk assessments, implemented care plans and evaluations
- Conditions affecting central circulation; shock, heart failure, and/or hypotension
- Conditions affecting peripheral circulation; peripheral vascular disease, arterial disease
- Sensory deficits

#### Example of individual vulnerability factors for pressure ulcer development

Problem	Example	Rationale
Acute Illness	Acute Infection Critically ill Trauma	Associated dehydration / pyrexia Circulatory Fracture
Specific cohorts of patients	Elderly over 70 years Paediatrics	70% of pressure ulcers occur in these age groups due to a combination of age related skin changes and increased comorbidity factors  Pressure/shear (casts/equipment)
Incontinence Pyrexia	Bladder or bowel Sweating	Damp skin from double incontinence strips acid mantle and general dampness increases friction and skin maceration
Poor nutritional status	Emaciated patients or Obesity	High association with acute and chronic illness
Vascular disease	Peripheral Arterial Disease	Decreased blood flow and micro vascular reflexes
Neurological disease	Multiple Sclerosis Stroke	Reduction in sensory perception and mobility. Postural changes and altered muscle tone
Immobility/ hyper mobility Postural changes or deformity	Parkinson's disease Curvature of spine	Reduced ability to relieve pressure Increased pressure to bony prominence
Loss of sensation (acute or chronic)	Diabetes Paraplegia Epidural	Reduced awareness of pressure
Lack of awareness Cognitive impairment	Sedatives  Dementia	Reduced mobility, Reduced awareness of pressure and pain. Unable to communicate if in pain.
Debilitating disease	Rheumatoid disease, Terminal illness	Multiple associated factors
Patient and carer lack of awareness of risk	Lack of knowledge	Educate patient and care givers to risk of skin trauma and repositioning

#### 5.3 Common Sites for Pressure Ulcers/Skin Inspection

Skin inspection should occur regularly, and the frequency determined in response to changes in the patients' condition in relation to either deterioration or recovery (NICE 2014).

The following areas of the body are considered most at risk:

- Sacrum
- Heels and toes
- Ischial tuberosity bones (seat bones) in chair bound
- Trochanters (hips)
- Other vulnerable areas include elbows, resting on chair arms
- Protruding bone in curvature of the spine
- Shoulders
- Back of the head (babies) and the frail elderly and terminally ill.

- Ears
- Any bony prominence
- MASD are defined as a redness or partial thickness skin loss involving the
  epidermis/dermis caused by excessive moisture to the skin they are usually located in
  the natal cleft and are not over a bony prominence. They are normally superficial without
  necrotic tissue but can be seen alongside a pressure ulcer

Also, at risk are parts of the body where there are external forces exerted by equipment or clothing, etc. e.g.

- Toes from heavy blankets
- Top of ears/noses from elastic securing Oxygen Masks and NG tubing
- I.V. Lines/catheters
- Bed ends
- Peripheral vascular disease and foot/toe deformities
- Anti-embolism stockings, elastic clothing, casts, infants are particularly vulnerable to pressure exerted by external equipment.
- Footwear in patients with Diabetes, Peripheral Vascular Disease and foot/toe deformities
- Tracheostomy and endotracheal tubes for patients in intensive care
- Skin folds in morbidly obese where pressure and moisture is involved

#### **Heel Ulceration**

- Patients with peripheral arterial disease and neuropathy are at higher risk. These are two
  known complications of diabetes; therefore diabetes is a major risk factor.
- Other risk factors for developing heel pressure ulcers include: immobility of lower limbs due to surgery, paresis, structural deformity, and dementia (Younes et al, 2004; Gefen, 2010) cited by Cook & Fowler 2013)
- In people with diabetes, heel ulcers are very serious and often lead to below-the-knee amputation (Younes et al, 2004)

Contact: in acute the medical equipment librarians to access heel elevation devices. In the community (not including community hospitals) authorised prescribers can access heel elevation devices via the Integrated Community Equipment Service (ICES) (Appendix 6).

- Heels must be completely off loaded. The use of air mattresses is not sufficient to
  prevent pressure ulcers to vulnerable heels. For category 1 4 heels; all patients identified
  as vulnerable to pressure injury despite repositioning the heels should be completely
  elevated off the support surface ("float the heels").
- Heel protection devices should elevate the heel completely, without pressure to Achilles tendon and the knee should be slightly flexed to avoid popliteal vein obstruction leading to Deep Vein Thrombosis (EPUAP/NPUAP, 2018). In the community Repose foot protectors, Heel Pro Boots and Heel Pro Advance Boots are available.
- Risk assessments must be completed and documented clearly prior to using any offloading devices.eg risk of falls
- A pillow under the calf elevates the heel from the mattress while at rest but may be
  unsuited to patients on movement if they have impaired cognition. Additionally, a pillow as
  a heel offloading device may lack consistent use as it may be removed from offloading the
  heels and used for other purposes.
- Slide sheets must be used to move all immobile patients so as to prevent skin injuries from shearing on movement. Slide sheets must be positioned under both the heels and sacral area when moving patients.
- Any patients that present with foot drop (dorsiflexion) must be referred to Physiotherapist for appropriate advice.

#### 5.4 Risk Assessment

Risk assessment identifies people who are susceptible to pressure ulcer development, in order to target appropriate preventative interventions.

- Should only be used as an aide memoire and not replace clinical judgement (NICE, 2014)
- Provide an assessment framework for the practitioner
- EPUAP recommends every patient in any care setting should be assessed
- ESHT states that a risk assessment should be completed within 2 hours of admission in to an acute setting or on the first visit in the Community.
- Re-assessment should be undertaken if the patient is transferred to a different ward/ unit or another hospital or if the patient's condition deteriorates
- An indication of risk should be followed with an action plan and completion of the Pressure Ulcer Prevention Plan (PUPP).

#### PURPOSE T – Pressure Ulcer Risk primary or secondary evaluation tool (Appendix 1)

ESHT use **PURPOSE T2** as the only risk assessment tool. It is intended to identify adults at risk of pressure ulcer development. It makes a distinction between primary prevention (i.e. those at risk of pressure ulcer development) and secondary prevention (i.e. those who already have a pressure ulcer)

Alternative risk assessment tools are available for use with mothers during labour (Appendix 3) and for paediatrics (Appendix 4).

PURPOSE T2 consists of two parts:

**Screening: Screening must be completed for all patients.** To identify patient at risk or not at risk. If you tick any yellow or pink boxes this means the patient is at risk and you need to continue to complete full assessment.

#### Full assessment will include:

- Immobility
- PU Status (existing and previous)
- General skin status (including pain over bony prominences)
- Perfusion
- Diabetes
- Sensory perception
- Moisture
- Nutrition including BMI

#### 6. ESHT Incident Reporting and Governance

Report all category 2, 3, 4, unstageable, medical device related pressure ulcers and deep tissue injury on DatixWEB.

See Guidelines for reporting Pressure Ulcers via Datix <u>Guidelines-for-reporting-pressure-ulcers-via-Datix.pdf</u> (esht.nhs.uk)

If a pressure ulcer has deteriorated from the original categorisation, please indicate this on the Pressure Ulcer page within the original Datix incident. Please tick the box to indicate the damage has deteriorated and give the date the deterioration was discovered, and the new category.

The Tissue viability team review and action Datix incident reports for all pressure ulcers, both ESHT and Non-ESHT acquired. Staff will be asked to undertake a Pressure Ulcer root cause

analysis (PU RCA) for category 3 and 4 pressure ulcers and deep tissue injury (Appendix 7) and for an 'unstageable' if clinical concerns raised and discussed with TVNs.

Staff will be asked to undertake a Clusters RCA where there are 5 of more category 2 and/or unstageable pressure ulcers reported in any one month in the inpatient areas or 9 or more in community locations (Appendix 8).

Monthly audits are completed locally (Appendix 10). A monthly Pressure Ulcer Review Group (PURG) will be held consisting of TVNs, Governance Lead Nurses, and AHPs, who will review pressure ulcer clusters and RCA, identify themes and trends and facilitate shared learning. If it is found that policy has not been followed it may be necessary to raise an incident under the Serious Incident process and forwarded to WPSS – Weekly Patient Safety Summit (Appendix 5: Pressure Ulcer reporting flow chart)

Identified themes are escalated to the Pressure Ulcer Steering Group (PUSG) and learning is discussed and disseminated by the Division

Sometimes although there are no omissions of care, patients for whatever reason choose to not follow the treatment plan that has been advised. There is guidance on how this can be documented in the *Planning Care Together policy: link*<u>Planning Care Together Policy</u>

If you feel or suspect 'harm' or 'abuse' has occurred raise a Safeguarding Adults concern with Social Services, regardless of the category. To do this, email <a href="mailto:hscc@eastsussex.gov.uk">hscc@eastsussex.gov.uk</a> — Health and Social Care Direct and copy in ESHT Safeguarding Team on <a href="mailto:esh-tr.SAAR@nhs.net">esh-tr.SAAR@nhs.net</a>. ESHT Safeguarding Team will inform the relevant management structure of concerns and initial decision making once they have been informed by ASC.

#### 7. Skin Assessment and Preventative Interventions: aSSKINg

Research carried out on behalf of the NHS Midlands and East NHS Trust, outlines the 7 'essential care' steps to prevent pressure ulcers. We know that most pressure ulcers are avoidable (95%), and the risk of them occurring is increased by poor hydration, nutrition and a lack of individualised care.

#### 7.1 Stop the Pressure – aSSKINg campaign



#### 7.2 Assessing

All patients require completion of a pressure ulcer risk assessment using Purpose T2, completed within 2 hrs of admission or on 1st visit in the community

It provides an assessment framework and should be used alongside clinical judgement to develop the care plan within the pressure ulcer documentation using aSSKINg care bundle (Appendix 1).

#### 7.3 Surface

On all in-patient beds, as a minimum requirement, a pressure redistributing foam mattress must be in place. Patients require close observations of skin changes to pressure areas and an assessment of individual risk documented with appropriate actions.

 All patients at risk and their carers should have information regarding repositioning and recognising early signs of pressure damage

Preventing Pressure Ulcers - A guide for residents, patients, carers and staff

- All patients must be risk assessed within 2 hours of admission and provided with an appropriate mattress as supported by the documented PURPOSE T2 (Appendix 1) and mattress selection flow chart (Appendix 2).
- 30-degree tilts are recommended to offload pressure to the spine for those patients at risk of, or with, pressure injuries to the sacrum or coccyx and avoids side lying onto bony hips.
- Patients should not be routinely positioned onto bone prominences or where there is non-blanching redness/ existing pressure ulcer.
- Hybrid mattress pump boxes and Alternating dynamic mattresses are distributed via the Equipment Librarians on both acute sites. These are also available out of hours at the acute sites via the porters
- District nursing teams and Crisis Response Teams also have 24 hour access to basic pressure relieving equipment via ICES Peripheral Stores that are situated in various community nurse bases. Peripheral stores can only be accessed by authorised ICES PIN holders.

Conquest Hospital

Monday – Friday Equipment Library – Ext
Out of Hours - Contact Porters

Eastbourne DGH

Monday – Friday Equipment Library – Ext
Out of Hours – Contact Porters

If no Hybrid mattress box is available, commence the Pressure Ulcer Prevention Plan using the repositioning regime. Leave a message with the Equipment Library. Check nearby areas/wards for unused spare equipment that might be available and contact the site manager who may be able to locate an appropriate mattress hybrid box.

Once patients are discharged the mattress hybrid box should be returned to equipment library, and the mattress cleaning in line with infection control policy (Appendix 9)

NB: All patients whether or not they are on a Hybrid or dynamic air mattress or sitting in a chair require repositioning and active monitoring. Frequency of repositioning should be determined for individuals based on skin observations and documented in the prevention plan documentation.

Patients in their homes will have access to pressure relieving equipment via ICES (Integrated Community Equipment Service) following appropriate risk assessment by the District Nursing Team, Occupational Therapists, Physiotherapists or other qualified personnel. Community equipment is prescribed via an online ordering system, which is only available to prescribers with a valid ICES account. Staff who regularly need to access equipment for use in the community should contact their line manager to request that an application is made for an ICES account and PIN.

Following assessment, the District Nursing team do not always provide pressure relief. If the patient is assessed as being at risk of pressure damage, due to sitting for prolonged periods of time, but no other nursing intervention is required, people are encouraged to purchase a pressure relieving cushion or mattress overlay e.g. an visco-elastic foam. These are available in-store and online from a number of stores or chemists that sell a range of mobility equipment/independent living aids.

- In the community Millbrook Healthcare are currently the contracted service provider for ICES and are responsible for cleaning, maintaining and repairing the mattresses they supply. 24 hour emergency equipment breakdown support is available by contacting them through the local depot phone number 03332 400599.
- Seating/cushions are available in the Community subject to appropriate risk assessment and confirmation that an ICES eligible need has been identified
- Static mattress overlays and static and dynamic full replacement mattresses are available in the community. Prescribers should consider whether the risk of falls will increase if a mattress is changed, or a mattress overlay is added. If bed rails are also used (with or

without bumpers) a formal risk assessment covering the risks of head, neck or chest entrapment, entanglement of limbs, and bed falls, MUST be undertaken and approved by an ICES authoriser prior to prescription, The latest version of this risk assessment can be found on Millflow (Millbrook's online ordering system). Please also refer to the MHRA guidance on Safe Use of Bed rails (updated March 2020): <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/880287/FINAL\_Safe\_Use\_of\_Bed\_Rails\_v3.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/880287/FINAL\_Safe\_Use\_of\_Bed\_Rails\_v3.pdf</a>

- A fire risk assessment must be completed if dynamic airflow mattresses, overlays or cushions (including powered hybrid mattresses) are prescribed and a referral made to East Sussex Fire and Rescue Service for a Home Safety Visit, subject to client consent.
- Same day or next day orders are available 7 days a week, 364 days a year (Christmas
  Day is the only day that these are not available). They require authorisation from an ICES
  Pooled Budget Manager and must be authorised by 2pm. Local procedures are in place
  for weekends when there are no authorisers on duty. Please note that these
  arrangements may be subject to change ICES PIN holders should be informed directly
  by their Pooled Budget Manager of any changes in service or procedure.
- To ensure support surfaces are prioritised and used appropriately reassessment should be made of all patients on the ward daily, and in the community at each visit, with a view to stepping down patients and utilizing resources in the best interests of all patients. Risk assessment and change of mattress should be clearly documented in patient's pressure ulcer prevention plan. (PUPP).

## 7.3.1 Seating

European (EPUAP) and US (National Pressure Ulcer Advisory Panel) <a href="www.epuap.org">www.epuap.org</a> and <a

Taken from: All Wales best practice Guidelines: seating and pressure ulcer 2018 All Wales-Seating and PUs FINAL(1).pdf (wwic.wales)

## Factors in pressure ulcer development for the seated patients:

There are three main factors to consider in seated pressure ulcer development and the speed of this tissue damage depends on:

- 1. The amount of pressure applied to the tissue
- 2. The length of time the unrelieved pressure is applied
- 3. An individual's tissue tolerance to injury.

This suggests that the higher the pressure on the tissues, the shorter time it takes for the tissue to become damaged and breakdown. However, lower pressure over longer periods of time also causes ulceration as the tissue is being repeatedly damaged by pressure, and therefore loses its tolerance to injury. The effect of shear forces (which act in a direction parallel to the skin) can exacerbate the effect of pressure on the tissue, resulting in less time and pressure required for tissue breakdown (Wounds International, 2018; NPUAP et al).

## Managing risk

The ability for an individual to be seated appropriately and safely has a range of health and social benefits. The potential risks of sitting should be considered alongside the potential benefits to the

individual (e.g. function, health and wellbeing), and managed as part of a multidisciplinary team approach to the individual's care.

The provision of appropriate seating should be used to manage risk and prevent pressure ulcers, however, in circumstances where pressure ulcers occur, conventional advice is that bed rest is often recommended. Despite this, there needs to be a balance with considerations of quality of life, physiological function, and additional objectives of care and further risk of pressure damage in other vulnerable areas.

Skin checks

Visual skin changes are the best indicator for identifying early pressure damage (AWTVNF, 2017). Discomfort and pain are also useful predictors to skin and tissue damage (Hall & Guyton, 2010; NPUAP et al, 2018). However, some individuals are unable to feel discomfort or communicate these symptoms, so pain and discomfort should not be relied upon as indicators or predictors of tissue damage.

Individuals should be encouraged to perform regular changes of their position. Guidance or assistance from carers may also be necessary to perform this safely and effectively.

In care settings where staff is available a full stand is recommended.

## Key recommendations for repositioning when using seating equipment:

- 1. Pressure relief should be performed every 30 minutes lasting 30 seconds (Sonenblum et al, 2014)
- 2. Individuals should not remain seated for longer than a 2-hour period at any one time during the day (National Institute of Health and Care Excellence [NICE], 2014).
- 3. If sitting in a chair is necessary for individuals with existing pressure ulcers in the seated region, sitting should be limited to three times a day in periods of 60 minutes or less. The individual's seat, posture and sitting times should be reviewed and modified if the pressure ulcer fails to improve (NPUAP et al, 2018)

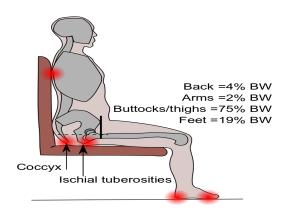
These recommendations may need to be adapted to an individual's level of risk, given that there are a number of influencing factors to consider in relation to reducing and managing the risk of pressure ulcers (such as incontinence, malnutrition and comorbidities).

## **Seating posture**

The seating support surface should provide a safe, stable and comfortable means of supporting the forces exerted by the person. In order to remain upright, a seated person is required to maintain a stable position and counteract the forces of gravity. The ability to do this is compromised for people who are acutely ill, frail, or have a neurological impairment (Collins, 2001).

The most important consideration when seated is the position of the pelvis, as this will directly influence the position of the lower limbs, head and the spine (Ham et al, 1998). It is estimated that typically 75% of the body's weight is taken through the pelvis when an individual is sitting (Collins,

2001). The main contact between the pelvis and the seat surface is via the small, rounded ischial tuberosities (sitting bones of the pelvis).



Estimated proportion of body weight support by a seat (adapted from Collins, 2001). Red spots highlight common locations of pressure ulcers that occurs in the seated individual. BW = Body weight.

## Principles of seating

An ideal posture when sitting consists of a stable pelvis where the ischial tuberosities (sitting bones in pelvis) are evenly in contact with the seat and the head is positioned above the hips and both feet are supported.

This posture may not always be possible, however, seating equipment can be provided to help individuals achieve an optimum posture within their limits and functional needs

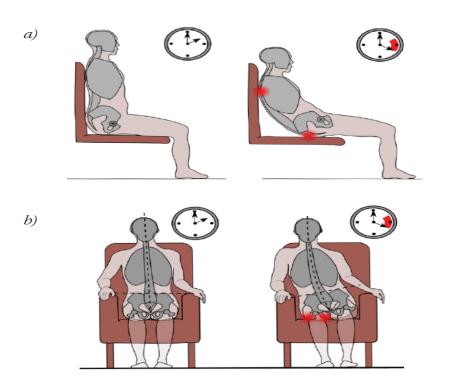


Figure 2. Seated postures that result over time "Sacral sitting" (a) and side-leaning (b) causing uneven loading through the body. The red spots identify areas at risk of developing pressure ulcers.

## **Seating Assessement**

## Acute in-patient areas

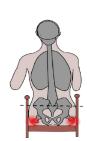
- If correct, the set-up of a seat or chair can have a positive impact on an individuals comfort, function and stability
- The surface of the seat is just as significant as the overall set-up; symmetry is often a goal when considering the principles of seating as this promotes an even pressure distribution.

#### Seat width - too wide

This results in the individual leaning to one side to support themselves on the armrests. This can cause fatigue if the position is held for long periods of time without support. This leads to increased pressures to one buttock (the side they are leaning towards) and increases the risk of pressure damage to that buttock. Elbows are also at greater risk of skin breakdown when leaning to one side. Over time, postural complications such as scoliosis (spine curvature) can develop.

#### Seat width - too narrow

This can be restricting for an individual leading to a reduction in function and inability to perform pressure relieving exercises. The outer aspects of the hips are at greater risk of pressure damage. To reduce this risk there should be a 2.5cm gap between the outer aspect of the hip and the inside of the chair's thigh supports/armrests.



#### Seat height - too high

This results in the individual's feet being unsupported and the individual's weight supported only by the seat surface. This position also results in sliding in the chair in order for the individual to feel 'grounded'



to provide a more stable sitting position. This increases the shear forces (acting in a direction parallel) to the buttocks increasing the risk of pressure damage, specifically at the sacrum and coccyx.

#### Seat height - too low

This results in high pressures going through the buttocks, specifically under the ischial tuberosities and feet.

The thighs are a good area of the body to distribute pressure, due to a larger surface area with a lack of bony prominences. The seat height should be adjusted to allow for this.



## Seat depth - too deep

This can have an impact on a person's overall posture and pressure ulcer risk. The individual will not be able to sit all the way back, causing them to lean backwards and resulting in shear forces at the interface of the buttocks. The pressures at the



sacrum and coccyx will be higher in this position due to the altered position of the pelvis. To reduce this risk, the set-up of the seat will need adjustment.

#### Seat depth - too shallow

This results in a reduced contact area between the thigh and the seat surface. This will cause poor distribution of pressure throughout the buttocks and upper leg. The ischial tuberosities are at higher risk of pressure damage due to the reduced seat depth.



The set-up of the seat will need to be adjusted to reduce this risk. A distance of 2.5cm is recommended between the back of the knee and the front edge of the seat.

## Seat-to-back angle (Recline)

The back section of a chair may be adjustable using recline, this can be beneficial for a change in position for the individual. However, an inappropriate seat-to-back angle may result in excessive pressures, specifically shear forces at the interface of the buttocks as a result of the person sliding forward.



Some wheelchairs and specialist armchairs provide an ability to tilt the seat as shown. This assists a person to maintain a good posture and reduces the risk of pressure damage to the buttocks and feet.



## Seating assessment - community setting

A seating assessment is recommended for individuals who sit for prolonged periods of time in order to assess posture and appropriately prescribe specialist armchairs or seating for wheelchairs, that will improve and maintain function for the individual

- The assessment should be person-centred.
- The individual needs to understand why specialist equipment is required, the potential impact on their lifestyle and benefits such as the prevention of pressure ulcers (Stephens & Bartley, 2018)

## **Specialist Seating**

- Specialist Postural Seating Service is provided by Wheelchair Services for nonambulatory clients who have complex postural requirements. Referrals are restricted to specific ICES prescribers and must be approved by ICES Panel. Referrals will not be accepted directly by Wheelchair Services for this purpose... This assessment is often in collaboration with the multidisciplinary team which may include a doctor, tissue viability nurse (NICE, 2014), and community nurses.
- Referral to wheelchair services is necessary if specialist seating is required for wheelchair users. Referrals can be made directly by all Health and Social Care professionals.
- Static air overlays are available for use on riser recliners, particularly on client's own chairs, but these should be used with caution, taking into account the effect it will have on the overall dimensions of the chair, and whether shear forces are still likely to be created due to the recline function.
- In the community ICES do not supply pressure relieving "chairs" as stock items and any
  requests for such a chair would have to go through the ICES panel after consulting with a
  Pooled Budget Manager to confirm that there is an ICES-eligible need. Prior to any
  request for such equipment, seeking advice and guidance via the Tissue Viability Nurse
  Specialist is essential.
- Specialist seating/pressure relieving cushions are available for community patients via ICES following appropriate risk assessment.

## The below checklist may be used to determine if a cushion is suitable: Is the individual comfortable? Is the individual within the quoted weight limit stated by the cushion manufacturer? Is the cushion compatible with chair size? Will it stay in place? Does adding the cushion change the set-up of the chair? E.g. does it change the height of the user in the chair? Can the user still use the armrests? Does it increase the risk of entrapment? Is the cushion prohibiting function or activities for the individual? Are there any unloaded areas (not in contact) of the thighs/ Is there risk of it being used incorrectly? E.g. positioned on chair in an incorrect orientation. Does the cushion help support the individual's posture in the Does the cushion provide adequate pressure redistribution under the buttocks? (Check for 'bottoming-out'). What training does the individual or their carers require? What maintenance does the cushion require? Who should be contacted if there is concern about the cushion?

## 7.4 Skin Inspection

The skin should be assessed on every opportunity. A thorough skin assessment should be done at least 3 times a day for in patient settings and at every visit for patients in the community. Look or feel for:

- ✓ Persistent erythema
- ✓ Non-blanching hyperaemia
- ✓ Blisters
- ✓ Localised heat, localised oedema
- ✓ Localised induration
- ✓ Ask about pain

In patients with darkly pigmented skin, observation of erythema is prevented (Bennett, 1995), resulting in the observation of early signs of tissue damage being less visible than lightly pigmented skin (Scanlon, 2004). Close examination of the skin is required to ensure that effective preventative strategies can be implemented.

This information should be recorded in the evaluation of PURPOSE T2 and on the skin assessment chart whenever assessment/checks are carried out. (Appendix 1). It is very important that you discuss patients' at risk pressure areas and what prevention care interventions are in place. This should be actioned at each handover using the SSKIN bundle as guidance.

For dry skin use emollients to moisturise and prevent cracking to optimise the skin's outer protective barrier against infection. Use patient's usual ointment or cream to avoid allergies. This should be prescribed for the individual and where possible use the patient's own prior to ordering through pharmacy or NHS Supply Chain. Refer to Dermatology for specialist skin advice. Avoid massage and rubbing skin to prevent pressure ulcers where blood vessels and fragile skin could easily be damaged (www.epuap.org. 2018)

Where anti-embolism (AES) stockings are in use for venous thromboembolism (VTE) prophylaxis for a number of patients these stockings are not appropriate and increase the risk of pressure ulcers to heels - refer to NICE CG92, (2010). Do not offer anti-embolism stockings to patients with:

- Suspected or proven peripheral arterial disease
- Peripheral arterial bypass grafting
- Peripheral neuropathy or other causes of sensory impairment
- Local condition in which stockings may cause damage, such as fragile 'tissue paper' skin
- Peripheral "pitting" oedema

## For further information refer to:

Venous Thromboembolism Diagnosis, Treatment and Prevention Policy and Procedure

## 7.5 Keep Moving

Repositioning frequency will be determined by the individual' skin tolerance, level of activity and mobility, general medical condition, the support surface they are on and their consent.

Use 30 degree tilts and slide sheets to reduce shearing forces and friction.

Avoid positioning onto areas with pressure damage

- Slide (or glide) sheets must be used to assist with movement of all immobile patients and for those who have difficulty transferring to prevent shearing and potentially causing stripping, blisters or grade 2 pressure ulcers, particularly in the older persons skin and/or where oedema is present.
- Slide sheets should be available on all wards via the Equipment Library and in the community via ICES (Integrated Community Equipment Service). In-situ slide sheets are available via

ICES subject to clinical reasoning and risk assessment. Requests for specialist moving and handling equipment or turning equipment can be considered for clients in the community by making a request to ICES Panel. Requests must be clearly presented and supported by a TVN.

- Promote mobility and ensure correct footwear is worn.
- Complete falls risk assessment if indicated.

## 7.6 Continence/Moisture Management

- Individual assessment of patients' skin and continence needs should be undertaken as per prevention plan.
- For patients who have incontinence it is recommended to use a soap substitute with moisturiser (avoid soap which has a drying effect on skin and strips the skin of its natural protective acid mantle).
- Use absorbent and close fitting continence pads to promote skin dryness as required according to individual assessment (McCoy, 2009).
- For those with double incontinence where skin is vulnerable to excoriation protect with a wash product suitable for intact skin. If the outer layer is damaged use a barrier film. Avoid greasy barrier creams with pad use.
- For Bristol stool 6-7 and immobility refer to: <u>Clinical Guidelines for the use of Faecal</u> Management Systems
- On discharge from hospital, or via community teams Bowel and Bladder service referral should be completed, either via esearcher or community referral system

## 7.7 Nutrition/Hydration

Patients who are malnourished are highly vulnerable to developing pressure ulcers and wound/ other infections. Therefore, nutritional assessment and support is highly important and this is recognized in the pressure ulcer risk assessment tool (PURPOSE T2). Good nutrition and hydration play an essential role in keeping skin healthy. Nutrition and hydration were identified in an NHS Improvement Project in 2006 involving SSKIN (N being Nutrition), as one of the five key components of care in the prevention and treatment of pressure.

Nutritional support/ supplementation for patients in the prevention and treatment of pressure ulcers should be based on the Malnutrition Universal Screening tool (MUST), general health status, patient's preferences and expert (Dietician) judgement supporting nutritional decisions. Refer to Trust nutrition guidelines and MUST tool <a href="https://www.bapen.org">www.bapen.org</a>.

Poor nutritional status is a risk factor for the development of pressure ulcers so early identification and treatment of malnutrition is crucial.

 Patient must be referred to dietician to address extra nutritional intake required for category 3 and 4 pressure ulcers, or if MUST score indicates

## 7.8 Giving information

Patients, their family or carers, should be made aware of their level of risk (NICE, 2014) and provided with information. A patients/carers information leaflet is available on the hospital intranet for patients, families and carers.

<u>Understanding-the-risk-of-pressure-ulcers-when-sitting-in-adults.pdf (esht.nhs.uk)</u>

Preventing Pressure Ulcers - A guide for residents, patients, carers and staff

## 8. Bariatric Equipment

If the patient's weight exceeds 30 stone (190 kg) or their body shape restricts mobility then bariatric equipment may be required, in the acute via the Equipment Library (office hours Monday to Friday), or the Site Managers (out of hours). Additional support is available from the Moving and Handling advisers.

For community plus-sized users, there is a limited selection of equipment available via ICES. However, due to the complex considerations involved in prescription of bariatric equipment, non-stock solutions may need to be sought, and a swift solution may not be possible. Where stock equipment is suitable, e.g. where the user would be within the weight range and dimensions of the stock bariatric bed, it is not usually possible to deliver on a same day basis, as a pre-delivery visit will need to be undertaken by the service provider to check access and delivery arrangements, suitability of flooring in the property, etc.

#### 9. Care of Devices

These are fundamental to patients' treatment, safety, dignity, comfort and recovery and with constant use have limited functional life.

- Observation of mattresses and seating should determine adequate depth of padding with fist testing of foam mattresses to identify if 'bottoming out' has occurred. Covers should be inspected for any breach where fluids can enter and contaminate the underlying foam. With early inspection between patient episodes and early detection in line with MHRA (2010) a replacement mattress cover may be used rather than condemning a whole mattress, saving on purchasing and disposal costs.
- Mattresses should be cleaned after contamination from incontinence and between all patients using sporicidal wipes.

Refer to Policy for the Decontamination of Reusable Equipment and the Hybrid Mattress Decontamination Form (Appendix 10)

Policy for the Decontamination of Reusable Equipment

## 10. Discharge Planning

Prior to transfer of care discharging patients at high risk or with existing pressure injuries, consultation must take place between appropriate social and health care professionals, i.e. Social Services, District Nurse Team, Hospice at Home; Joint Community Rehab team; Allied Health Professional; Multi-Disciplinary Team and family/carers.

- For all patients returning home or to a Residential care home a referral via Health & Social Connect to the District Nursing Team must be completed.
- For patients returning to nursing and residential homes, or receiving care at home, ensure ESHT Transfer of Care documentation completed

On discharge of patients with complex wounds that the TVN has been involved with the ward staff should inform the acute TVN

#### 11. Occupational Therapy Pathway

- For most complex discharges the Occupational Therapists (OT) are likely to be involved with the patient's discharge and are therefore well placed to coordinate the ordering of pressure relieving equipment to expedite smooth hospital discharge.
- Discussion between OT and ward nurses is required to assist with the decision-making process.

• If the OT's are **not** involved in the patient's discharge and the patient needs pressure relieving equipment then the ward staff need to contact the patient's District Nurse who will be able to arrange this via ICES, there may be a delay in discharge for safely.

## 12. Equality and Human Rights Analysis

This policy aims to treat people equally in terms of access to care whilst maintaining an individualised and personalised approach to care. It is ESHT's aim to eliminate unlawful discrimination, harassment and victimisation. People must be treated the same whether they share a protected characteristic or not. Equal opportunity for effective pressure ulcer prevention will be given to all. Patients must be treated with fairness, respect, equality, dignity and autonomy. This policy has considered but not identified any negative impacts or inequalities on any people with a protected characteristic (Appendix 11).

## 13. Training

Training for pressure ulcer prevention and management is not mandatory but ward matrons / clinical leads should recognise it is essential for that all clinical staff to attend. Training is available to all staff via MYLearn online resources. Ad-Hoc training can be provided by the Tissue Viability Team if requested.

## 14. Monitoring Compliance with this Document

Monitoring of this policy is through:

Pressure Ulcer Review Group (PURG)

Pressure Ulcer Steering Group (PUSG)

Patient Safety and Quality Group (PSQG)

Quality and Safety Committee (QSC)

Weekly Patient Safety Summit (WPSS) for those incidents deemed to be a Serious Incident

# **14.1 Document Monitoring Table**

Element to be monitored	Lead	Tool	Frequency	Reporting arrangements	Acting on recommendati ons and Lead(s)	Change in practice and lessons to be shared
Policy and Procedures	Tina Lloyd	Review of policy	Annually	Reporting quarterly to the PSQG	Please see list of leads at front of document	Required changes to practice will be identified and actioned within a specific time frame. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.
Nursing	Divisional Heads of Nursing	The Excellence in Care audit tool is used monthly to assess health records regarding the compliance with Essential Care	On-going monthly basis	Reported in divisional Integrated Performance Reviews (IPR)	Ward Matrons and Community Team Leads	Required changes to practice will be identified and actioned within a specific time frame. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.
Immediate escalation of risk management issues	Divisional Heads of Nursing	Spot check audits, learning from incidents	On-going	All category 3 & 4, DTI and unstageable when requested pressure ulcers are reported into PURG	Ward Matrons and Community Team Leads	Required changes to practice will be identified and actioned within a specific time frame. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.

#### 15. References

Addressing skin tone bias in wound care: assessing signs and symptoms in people with dark skin tones: Wounds UK 2021. <u>Best-Practice-Statement-Addressing-skin-tone-bias-in-wound-care-assessing-signs-and-symptoms-in-people-with-dark-skin-tones.pdf</u> (esht.nhs.uk)

Clark, M., Defloor, T, and Bours, G. (2004) A pilot study of the prevalence of pressure ulcers in European hospitals. In Clark M. (ed) (2004) Pressure *Ulcers: Recent advances in tissue viability.* Quay Books. Wiltshire.

European Pressure Ulcer Advisory Panel Classification of Grading www.epuap.org

European Pressure Ulcer Advisory Panel (EPUAP) and National Pressure Ulcer Advisory Panel (NPUAP) (2014) International Guidelines on Pressure Ulcer Prevention <a href="https://www.npuap.org-2018">www.npuap.org-2018</a>

McCoy, C. (2009) A practical guide to pads and incontinence dermatitis Continence UK 3. (4): 30-35.

National Institute for Health and Clinical Excellence (2014) Clinical Guideline 29: *The Management of Pressure Ulcers in Primary and Secondary Care.* www.nice.org

National Institute for Health and Clinical Excellence (2010) CG 92 Venous thromboembolism: reducing the risk www.nice.org

NHS Improvement (2018), *Pressure ulcers: revised definition and measurement framework.* Available online from:

https://improvement.nhs.uk/resources/pressure-ulcers-revised-definition-and-measurement-framework/ [13 May 2019]

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Nursing Midwifery Council (NMC) (Updated 2018) *The Code <u>https://www.nmc.org.uk/standards/code/read-the-code-online/</u>* 

Tissue Viability Society (2009) Guidelines for Seating www.tvs.org.uk

Tissue Viability Society (2012) Achieving Consensus in Pressure Ulcer Reporting. www.tvs.org.uk White, R., Ousey, K. and Hinchliffe, S. (2010) Implementing the quality accounts agenda in tissue viability *Nursing Standard* **17.** (24): 66-72.

Working together for safer services 2015: Kent Surrey Sussex Academic Health Science Network

#### 16. Associated Documentation

East Sussex Healthcare Trust Safeguarding Adults at Risk Policy, 2019

East Sussex Healthcare Trust Clinical Guidance: Policy for the Decontamination of Reusable Equipment

East Sussex Healthcare Trust Clinical Guidance: Equipment Library Policy

East Sussex Healthcare Trust Clinical Guidance: Clinical Guidelines for the use of Faecal Management Systems

Doc ID #1108 - Pressure Ulcer Prevention and Management Policy

East Sussex Healthcare Trust: Prevention & Control of Healthcare Associated Infection for all staff working in Primary and Community Care (Non-inpatient areas only)

East Sussex Healthcare Trust Planning Care Together Policy Respecting Patient Choice with Advised Treatment (Adults)

NHS Improvement Pressure Ulcers: revised definition and measurement framework <a href="https://improvement.nhs.uk/resources/pressure-ulcers-revised-definition-and-measurement-framework/">https://improvement.nhs.uk/resources/pressure-ulcers-revised-definition-and-measurement-framework/</a>

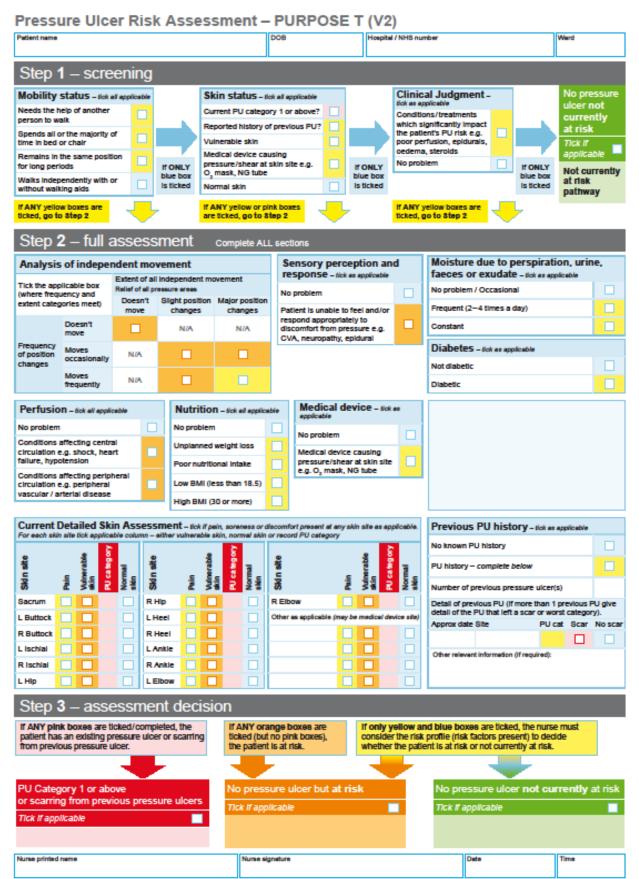
MUST Nutritional Assessment Tool www.bapen.org.uk

National management of pressure ulcers in primary and secondary care guidelines (CG29, NICE, 2005) International Pressure Ulcer Prevention and Treatment guidelines (European Pressure Ulcer Advisory Panel - EPUAP and US (National Pressure Ulcer Advisory Panel) <a href="https://www.epuap.org">www.epuap.org</a> and <a href="https://www.epuap.org">www.npuap.org</a> (2018)

#### SSKIN care bundle

<u>http://www.healthcareimprovementscotland.org/our\_work/patient\_safety/tissue\_viability/sskin\_care\_bundle.aspx</u>

## Pressure Ulcer Primary Prevention Plan Using aSSKINg Care Bundle



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Tick the actions you put in place and write in comments box: Specify interventions

Objective	Assessment	Action/Comment			
	What <b>colour</b> is the PURPOSE T risk assessment?	Date reassessed			
<b>a</b> – Assess	Red Orange Green  If risk assessment is RED, what is the :				
	Category Sites of damage				
	Obtain medical photography with consent Inform Medical team /GP	Date Date			
	Complete a wound care chart as secondary intervention if pressure ulcer present	Date			
<b>S</b> - Surface	Does your patient require <b>specialist pressure redistributing equipment</b> ? Select according to individual risk and clinical judgement.				
	Dynamic/air mattress	☐ Talley Plus or			
	Static foam Hybrid (if on dynamic mode if not record as static)				
	Do heels require offloading?	Yes □ No □ Device used			
<b>S</b> - Skin assessment	Document on <b>SKIN assessment chart</b> all pressure areas at risk and for daily checks	Tick all that apply:			
doodomont	<ul> <li>Assess areas at risk by pressing lightly to determine if red areas are blanching or non-blanching</li> <li>Darkly pigmented skin observe for signs of discolouration, texture change, hardness or swelling</li> <li>Complete skin assessment chart x 3 daily if in-patient</li> </ul>	Heels			

#### **Skin Assessment Chart**



Pressure Areas at Risk AM pm night AM pm  Sacrum and buttocks  Normal  Excoriation  Moisture Lesion (s)  Red and Blanching *  Red non-blanching * / purpleCategory 1  Scuff/broken blister  Black / discoloured / hard  Normal  Red and blanching * / purple Category 1  Scuff / broken / blister  Black / discoloured / hard  Normal  Red and blanching * / purple Category 1  Scuff / broken / blister  Black / discoloured / hard  Normal  Red and blanching * / purple Category 1  Scuff / broken / blister  Black / discoloured / hard  Normal  Red non-blanching * / purple Category 1  Scuff / broken / blister  Black / discoloured / hard  Site	night	ght AM	pm	night	AM	pm	night	AM	pm	night	AM	pm	r	t Sussex		NHS Trus
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Observer s Signature & status																

Record with a tick in the corresponding box observing all vulnerable skin sites – Write other sites. \*Press lightly to determine if red areas are blanching or non-blanching but for darkly pigmented skin observe for early signs of discoloration or change in temperature, texture, hardness or swelling. Write on chart record "D" if a wound dressing is covering area of injured skin. Pressure ulcer assessment and treatment to be recorded on a wound assessment chart.

PLEASE USE ADDITIONAL SHEET FOR MULTIPLE PRESSURE ULCERS

## **Pressure Ulcer Prevention Repositioning Chart**

Can your patient reposition themselves?	Yes □ No □
f NO, record below position changes at requencies appropriate to individual	Physiotherapy/JCR required
	Yes □ No □
f declining repositioning assess for pain and provide verbal prevention education *.	Referral date
f r a: f	NO, record below position changes at equencies appropriate to individual ssessment  declining repositioning assess for pain and

**Can the patient reposition themselves?** If NO, record below position changes against time at frequencies appropriate to individual assessment.

	Date Position						
01.00							
02.00							
03.00							
04.00							
05.00							
06.00							
07.00							
08.00							
09.00							
10.00							
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22.00							
23.00							
24.00							

## **Patient's Position**

L30	Left side 30 degree tilt
R30	Right side 30 degree tilt
В	Back lying
SB	Sitting up in bed
SC	Sitting in chair (limited to 2 hrly periods)
+H	Offloading heels
OW	Off ward i.e. X-ray , OT & Physio
D	Declined repositioning * assess for pain and provide PU prevention education, if
	continues please consider 'Planning Care Together' policy.

	Is assistance to go to the toilet required?	Yes □ No □
I - incontinence	Is there a plan in place?	Plan
/moisture		
management	Are bowel and bladder devices/pads required and correctly selected?	Pad size Devices
	What cleansing and moisturising products are being used	Own □ Soap substitute ⊠ Barrier film □ Other
	If stools are type 6-7 follow infection control guidelines and consider faecal management system (in-patient only).	Is faecal management system in place? □
N – Nutrition &	Refer to dietician if Cat 3, 4 or deep tissue injury	Date
Hydration	Does the person require assistance with eating and drinking or modified diet and fluids?	Yes   No
<b>g</b> - Giving	Patient Pressure Ulcer Prevention leaflet given and discussed with patient, relatives or/and carers.	Yes □ No □ If no please explain
		why
cannot lay	lised Care Plan to be used to record individual breathlessness, has to have legs elevated.	requirements e.g. Person
Time and Date	e Signature and designation	
Time and Date	Signature and designation	



Mattress selection flowchart for Pressure Ulcer Prevention using

PURPOSE T v2 – in-patients

Primary/Secondary prevention No risk and Plus size guidance

Plus Size PU Category 1 or No pressure No scarring from damage but pressure (bariatric) over 30 previous pressure damage At Risk stone/ 190 ulcers not Kgs. currently at risk Immobile or Mobile or reduced mobility reduced mobility Static Contact the foam or Consider a hybrid Hybrid on static equipment hybrid on in dynamic mode mode or dynamic librarian (day static hours) or Site or full dynamic mode if reduced mode Manager (out of mobility hours) to hire in an appropriate Document if mattress (and Promote mobility patient declines or bed) allowing 4 and assist with if not appropriate hours for repositioning and delivery. Contact continuous active the Moving and monitoring Handling Team for patient mobility advice. If immobile or early signs of Static foam and damage use hybrid hybrid on mattresses are dynamic mode available via ICES in the community

## If mobility/nutrition/continence/general condition declines:

- Reassess using PURPOSE T
- Hybrid mattresses can be upgraded to dynamic as appropriate by requesting pump from the equipment library

#### Step down

- Prior to discharge as patients mobility and condition improves remove pump and place on static mode
- Return pump to equipment library when not in dynamic mode

## **Maternity Pressure Ulcer Risk Assessment (Plymouth)**

PAS LABEL	

MATERNITY PRESSURE ULCER RISK ASSESSMENT – Complete during labour

SKIN Condition parti cularl	y	MOBIL	<u>ITY</u>		MOI	STURE		APPETI	TE	
sacral/buttock areas Healthy	0	Norma	ally unrestricted	0	Moist, clammy skin		1	Normal		0
Dry	1		y restricted	3	Ruptured membranes					U
Oedema	1		Bedbound by equipment			Neither		0 pregnancy or		4
	-	monito		3				last mor		•
Pyrexia (generalised↑temp	) 1		al- walking around	2				Poor du	ring	1
	,							last 12 h	nrs	
Discoloured/↑temp Grade	1 2	Epidur	al- sitting lying	1				Fluid on	ıly	2
Broken /blister Grade	2 3	Epidur	al- bedbound	0				Anorexi	С	3
BMI (booking weight)		NEUR	<u>OLOGICAL</u>		TISS MAL	SUE NUTRITION		SURGE	RY_	
BMI >19-24.9	0	Motor	sensory deficit	4	1	Normal		None		0
BMI 25-29.9	1		al or spinal	4	Smo	ker	1	Elective	LSCS	2
BMI <19	1	Parapl	•	4	Ana	emia	2	Emerge	ncy	2
BMI 30-39.9	2	Periph	eral neuropathy	4	Stab	le diabetes	1	LSCS		
		(MS)						after lab	our >8	
55.00		<b>.</b> .	. (5 (1.11)		<b>.</b>			hrs		
BMI >41	3		esia (Pethidine)	2	Unst	able diabetes	2	Emerge	ncy	3
Significant change since	2	Genera	al anaesthesia	4				LSCS after 21	00bre	
booking			7	40.	I II ada		\			
Pressure ulcer risk factors:	=		7+ at risk	12+	High	risk 17+	very	High Risk		
Date/time		+2hrs	+2hrs +2hrs	+2hr	s	+2hrs +2	hrs	+2hrs	+2hrs	
Skin condition										
Skin condition  Mobility										
Mobility										
Mobility  Moisture										
Mobility  Moisture  Appetite										
Mobility  Moisture  Appetite  BMI booking weight										
Mobility  Moisture  Appetite  BMI booking weight  Neurological										
Mobility  Moisture  Appetite  BMI booking weight  Neurological  Tissue Malnutrition										
Mobility  Moisture  Appetite  BMI booking weight  Neurological  Tissue Malnutrition  Surgery										
Mobility  Moisture  Appetite  BMI booking weight  Neurological  Tissue Malnutrition  Surgery  TOTAL										

Modified from Plymouth Maternity Pressure Sore Risk Assessment Tool 2012

#### Ward: Paediatric Pressure Ulcer Risk Assessment The objective of this tool is to link the risk assessment process with a clearly Patient ID Sticker documented clinical decision regarding risk of pressure ulcer development This tool is designed to support (not replace) your clinical judgement in assessing whether the child in your care is at risk of pressure ulcer development. Please complete all sections and add comments if necessary. Please ensure that the statement of risk is completed fully and signed. Condition of skin (please circle) No problems Pressure Ulcer Oedematous Other wound/s: Dry Eczematous Inflamed Circle if the following are present: Cannula Tubing Cast Traction Other medical device Please give details: (Location/appearance and size of any areas affected) Please indicate level of risk for each category by marking the arrow with an 'x'. I.E. Typical for age group Completely immobile Comment: Sensation Cannot perceive No problems sensation over Comment: most of body Pain: Influence on movement Movement severely No pain limited due to pain Comment: Level of consciousness Unconscious. Conscious and alert No response to painful Comment: stimuli Continence Urine: Typical for age group Constantly wet or catheterised Comment: Faeces: Uncontrolled loose stools. Skin in almost constant contact Typical for age group Comment: with faeces Skin perfusion / Oxygenation No problems. Capillary refill<2seconds Severely compromised Comment: Moving and Handling Consistently difficult No problems to reposition Comment: **Head size** Significant increase Typical for age group Comment: Statement of Risk In my clinical judgement is low / moderate / high\* at risk of pressure ulcer development. \* Please delete as appropriate (Patients name) Date: Name of assessor (BLOCK CAPITALS): Signature: Planned interventions: E.g. Protective dressings, turning regime, mattress, referral to CNS-Tissue Viability, etc. (N.B. If a pressure ulcer has developed since admission please complete a clinical incident report.)

**ESHT Acquired Pressure Ulcer Incident Flowchart** 

ESHT Acquired Category 2,3,4, Unstageable, Deep Tissue Injury (DTI) or Medical Device Related Pressure Ulcer Reported on Datix Web

# Category 2/Unstageable (including Medical Device related) Pressure Ulcers (severity 2 minor incident)

- Provide verbal apology and record detail in patient record
- Ensure that a risk assessment is repeated and that a Prevention Plan is in place. Take appropriate action
- Monitor compliance through Excellence in Care Audits
- Monitor incidents through Divisional CG meetings

#### If deteriorates to category 3, 4 or Deep Tissue Injury (including Medical Device related)

- Update original report on Datix
- Tick the box on the pressure ulcer tab to indicate the damage has deteriorated
- Give the date the deterioration was discovered
- PU RCA required

#### Unstageable

 If TVN concerned about level of care PU RCA will be requested and required to be completed

# Category 3 & 4 and Deep Tissue Injury (including Medical Device related) Pressure Ulcers (severity 3 moderate incident)

- Provide verbal apology and record in patient record
- Head of Nursing to complete Duty of Candour follow up letter
- Complete PU RCA form and submit two weeks before due at PURG\* send to esh-tr.PressureUlcerReviews@nhs.net

\*Escalation process if PU RCA not received:

- Escalate to Assistant Director of Nursing for the Division
- If not received by next meeting escalate to Deputy Director of Nursing and Director of Nursing

# Pressure Ulcer Review Group (PURG) (monthly)

Review reports and identify harm, monitor trust action plan, duty of candour assurance, monitor compliance, update trust log and identify trends including clusters

Divisions for assurance of actions

#### Non-compliance with policy resulting in omissions of care

- Severity remains at 3
- If no substantial omission in care PURG recommend closure
- If PURG deems a substantial omission of care then submit to Weekly Patient Safety Summit (WPSS) for review
- If SI STEIS and follow SI flowchart
- If not SI

## Compliance with policy with NO omissions of care No Serious Incident

- PURG recommend closure
- Downgrade to severity 2 (no omissions of care only)
- Advise Division of findings to take to risk meeting for discussion and closure
- Division to share report with patient/ family (to close duty of candour process)
- PU RCA to be uploaded to Datix following PURG

#### Non ESHT Acquired Pressure Ulcer Incident Flowchart

Non ESHT Acquired Pressure Ulcer Reported on Datix Web that Deteriorates Under ESHT Care

Incidents of non-ESHT acquired PU damage reported on Datix will be reviewed by the TVN team. If appropriate the TVN team will review the patient.

# Category 2, 3 or Deep Tissue Injury damage that occurred prior to admission to hospital or community caseload that deteriorates

- Clinical review to establish if deterioration due to nature of damage, ie long lie
- Update original report on Datix, DO NOT re-report
- PU RCA NOT required as damage occurred outside ESHT care
- If omissions in our care identified from clinical review, PU RCA will be required and requested by the TVN –
  follow Category 3 & 4 and Deep Tissue Injury (including Medical Devices related) Pressure Ulcers (severity 3
  moderate incident) box overleaf

## Guidelines for the prevention of heel damage (in-patient)

- Is your patient Diabetic?
- Does your patient have PVD? Circulation problems/leg ulcers?
- Is your patient unable to reposition themselves independently?
- Is your patient unable to look after their own feet?
- Oedematous feet/legs?
- Consider whether a safe-guarding concern needs to be raised.
- **Is heel damage present?** If so have you raised a DATIX? Keep heels dry + offload until comprehensive assessment completed NO

- Inspect skin, cleanse & hydrate skin daily + document
- Educate patient/carers to report any concerns re: condition of their feet
- Ensure correctly fitting footwear is worn
- Ensure correct positioning of patient feet whilst in bed/chair, use glidesheets to reposition
- Remove anti-embolism stockings daily (if px)
- Complete patients Pressure Ulcer Prevention Plan with your care interventions

Offload Pressure with pillows (length ways) or offloading devices. Risk assess before deciding on appropriate device e.g. risk of falls

Refer for advice

Is there any deterioration in the condition of the heels?

NO

YES

#### **Continue Care**

Document in pressure ulcer prevention plan

**DIABETIC** – Vascular nurse/ Podiatry VASCULAR/PVD - Vascular nurse OTHERS - TVN referral and undertake ABPI

**OTHERS - TVN** 

On transfer to another ward or in-patient health setting

Offloading devices go with the patient.

## If patient is going home:

Patient to take home offloading device if safe. Repeat risk assessment ensuring equipment is safe to use at home or new environment.

Offloading devices are available from the Equipment Librarians at both acute sites

- Eastbourne : ex (13) 3573
- Conquest ex (14) 8403 or
- Ask for offloading heel device
- HEEL bootees available from TVN/Vascular Nurse



# PU RCA for Category 3, 4 and Deep Tissue Pressure Ulcers Acquired within ESHT

DatixWEB No			
Incident description (from Datix	(Web)		
Date reported on Datix:			
Division:			
Date of Admission:			
Time of Admission:			
Reason for Admission:			
Patient age:			
Ward:			
Was the patient admitted on the hospital with the damage?	e caseload or		
Where was the patient admitted	d from?		
Did Haemodynamic or spinal ir preclude turning or repositionin			
Was the patient end of life?			
If yes, did this make repositioni	ng intolerable?		
Was the patient non-concordar capacity?	nt despite full		
Was the planning together policimplemented?	су		
Was patient is known to acute/critical event occurred mobility or the ability to repositi	which affected		
Category and location of each pressure ulcer:	Location:	Category:	

## BACKGROUND INFORMATION:

Background and 0	Context:							
Co-Morbidity (including current / past medical history):								
,	uch as non-c	oncordance after e	xploring rationale as	to why patients do n	ot chose to take			
advice):								
Was the patient a redistributing equi		nny pressure						
If yes, state type a	and name of	equipment if it						
Mattress								
Cushion/seating r	equirements							
Heel devices	oquii omonio							
Where applicable	were the set	ttings monitored						
regularly to ensure at an appropriate	e that the equ	uipment was set						
Were other option	s considered	if the original						
equipment was in suitable for the cli		comfortable/not						
Where applicable								
ineffective, were o	ıllereni settir	igs trialled?						
Standards for bes	t practice (ple	ease gives dates ar	nd add extra lines as	required):				
Initial PURPOSE T risk assessment	Initial Skin Inspection	PURPOSE T Care plan in place	Wound assessment care plan	Request for pressure relieving	Incident report form completed			
1 Hak dageasment	Порсологі	and completed	care plan	equipment	Torm completed			
If the above week	act achieved	within 24 hours, pla	acco provido an oval	anation of any factor	a / iggues /			
concerns that pre			ease provide an expi	anation of any factors	s / issues /			
Comment on the	quality of the	accecements com	aleted:					
Comment on the	quality of the	assessments comp	neteu.					

Plan of care:				
Is there evidence of implementation of planned care	e with			
review?				
Is there evidence of managing risk factors?				
Is there evidence of reassessment of risk status?				
If not completed, please provide an explanation:				
Please comment on the quality of the plan of care:				
r lease comment on the quality of the plan of care.				
PATIENT CARE:				
Patient's Skin Care:				
How was the patient's skin cared for?				
What washing / slagning products were used?				
What washing / cleaning products were used?				
Were moisturising products used?				
Were moistanising products used:				
Was MRSA decontamination in place?				
·				
Continence Management:				
0 " 1 1				
Seating and posture:				
Did the patient sit out in a chair?				
If yes, state type of chair / seating cushion and				
length of time patient spent sitting out of bed				
Were the essentials of seating recorded e.g. can user's feet touch floor, is the seat too deep, etc.				
Is the person in a recliner chair; has shear been				
considered				
Considered				
Moving and Handling:				
Woving and Handing.				
	Yes		No	Partially
Was the M&H assessment completed?				,
The man accomment completed.	<u> </u>		1	1
	Yes	No	If yes, please of	give details?
Was any M&H equipment required?			, ,,	•
	1	I		

	Yes	No	Please state any unavailable equipment:
Was all the required M&H equipment available?	163	110	r lease state any unavaliable equipment.
vide dil ille required mai i equipment available.			
	Yes	No	Sometimes
Was the required M&H equipment being used?			
Did the patient spend any period of time on a trolley?			
If yes: length of time, type of trolley, indication patient was at risk?			
Nutrition and Hydration:			
Which teams were involved in the patients manage	ment.		
vviion teams were involved in the patients manage	inont.		
Other referrals made (i.e. Healogics, podiatry, phys	sio OT	vascular d	department).
ourse reservate made (not recategies, position), project	, o . ,	raooaiai c	
Duty of Candour - Being Open:			
Date of DoC conversation documented in notes (al	I		
categories of PU):			
Date of DoC letter (cat3/4 & DTI only):			
If DoC not completed, please state why not:			
Any Additional Information:			
· ·			
Please state the overall impression of the cause of	the pres	sure ulcer	rs and whether more could have been
done to prevent it?			
EINIDINICS:			
FINDINGS:  Care and Service Delivery Problems:			
Care and Corvice Delivery Frobients.			

Contributory Factors:	
Root Causes:	
Lessons Learned:	
Lessons Learned:	
CONCLUSIONS: Recommendations (copy to action pl	lan helow):
Trecommendations (copy to detion pr	an bolow).
Arrangements for shared learning:	
7 and angerments for other surface roaming.	
Job Title:	
Report date completed:	
report date completed.	
To be completed following PURG Date discussed at PURG:	
Recommendation of group:	

# ACTION PLAN

No:	Recommendation:	Action(s) to be taken:	Lead for the Completion of Action:	Deadline for Action:	Success Measures:	Evidence of Progress and Completion:	Link to Trust Wide Action Plan (if appropriate):



Name of staff presenting at PURG:

## Appendix 8

Ward/community team:

## Concise RCA – Cat 2/Unstageable Pressure Ulcer Clusters

Date to return form to Senior CEF:

DatixWeb	Site of	Category H	as incident	Was the	Is there any	Community	Summary / comments (please give a short	
number	damage		een opened	PURPOSE T	learning or	Patients: What	description of the damage)	
			nd reviewed	and care plan	area for	level of care		
		by	y handler?	in place?	improvement?	package is in		
\A/ED						place?		
WEB								
WEB								
WEB								
WEB								
WEB								
WEB								
			·					
Causes, themes	or trends identif	ied from above:						
<b></b>	Caacoo, alcineo di acina identino il cili abovo.							
What actions or changes to practice are to be undertaken? Please include staff member/team responsible.								
virial actions of changes to practice are to be undertaken? Flease include stail member/learn responsible.								
Llovy will this infor	mation be about	ad with your tan						
How will this infor	mation be shar	ed with your tea	arn?					
What assurance can you give to PURG changes to practice will be implemented?								
Name of person(s	s) completing th	is report:	Signature			Date		

Date to be presented at PURG:



# **Hybrid Mattress Decontamination Form**

Date:		
Ward:		
Form completed by:		
	Vac	No
	Yes	No
Has the cover been cleaned		
Has the cover been unzipped		
Is the cover breached		
If YES place the mattress (not mains box) in a bag a equipment library	vailable	from the
EDGH: 13 3573 or bleep 3573		
Conquest: 14 8403 or bleep 2399		
Attach this form to front of the mattress		
Phone the porters to collect breached mattress		
Contact equipment library to collect mains box (in ho	ours)	
EDGH: 13 3573 or bleep 3573		
Conquest : 14 8403 or bleep 2399		

Please note no mattress will be accepted without this form attached and in correct bag available from the equipment library

Please contact the porters when ready for collection

Physically clean the hybrid mattress with clinell wipes taking care to wash the sides , base and umbilical Has the cover been cleaned? If NO then clean before continuing Has the cover been unzipped? If NO then unzip to check for breach Is it breached? If YES to cover being breached If NO can be made up for the next patient Contact equipment library for a complete mattress bag Attach this form to front of mattress Phone the porters to collect



* Primary EIC Measure	ESSENTIAL CARE STANDARDS (ADULTS) - PRESSURE ULCER PREVENTION AND MANAGEMENT
** Secondary EIC Measure	Evidence base: <u>NICE QS 89</u> , <u>NICE CG 179</u> , <u>ESHT Guidelines for the Prevention of Pressure Ulcers;</u> <u>NHSI Recommendations 2018</u>
	Element: Environment
E1	The electric profiling beds are clean and do not have stickers, sticky tape, surgical tape on the bed frame.
E2	The pressure relieving equipment (including seating) is used appropriately to meet individual patient needs.
E3	Mattress covers are opened up after every patient discharge to check for signs of permeability/damage.
E4	Staff are aware that an investigation (RCA) needs completing for ESHT acquired category 3 & 4 pressure ulcers.
E5	Patients identified at risk will be provided with a glide sheet which must be used when moving patients.
	Element: Care
C1 **	Within 2 hours of admission to your clinical area or 1 <sup>st</sup> visit in the community, an appropriate pressure ulcer risk assessment tool (PURPOSE T2) is completed and updated weekly or if condition has changed.
C2	If the patient has a red or orange PURPOSE T2 risk assessment, there must be a documented care plan evidencing that the patient has been repositioned regularly, what equipment in use and what are the care interventions.
C3	Patients that are deemed at high risk of tissue damage are given the Trust's 'Pressure Ulcer Prevention – A guide for patients and carers' patient information leaflet'.
C4 **	A Wound Chart is completed if a pressure ulcer is present.
C5	Section 6 – Elimination/Continence section of the Nursing Assessment within the Integrated Patient Document (IPD) is complete.
C6	Continence products and barrier creams are available to safely manage patients with incontinence to protect the skin.
	Element: Leadership
L1 *	Staff are aware that all new pressure damage of category 2 and above pressure ulcers are recorded on DatixWEB.
L2	The Nurse in Charge/Team Leader is aware that PURPOSE T2 actions are completed as per assessment need (includes equipment in place where required).
L3	Any new continence issues identified are acted upon and documented in the health record – actions to include correct fitting of Fixpants if continence absorbent products are required.
L4	Staff are aware that all Category 3 and 4 pressure ulcers must be photographed by medical illustration within 24 working hours or by community nursing when discovered.
L5	The clinical area has a proactive Nutrition Link person.
L6	Link person audits practice and generates action plans to ensure improvements in practice.

## **Excellence in Care Metrics**

Standard	Standard	Primary Measure	Primary	Secondary Measure	Secondary
Title	No		Responses		Responses
Pressure Ulcers	L1	Number of Category 2 ESHT acquired PUs	Data source DatixWEB		
	L1	Number of Category 3 ESHT acquired PUs	Data source DatixWEB		
	L1	Number of Category 4 ESHT acquired PUs	Data source DatixWEB		
	C1			Purpose T2 initial assessment and care plan completed within 2 hours of admission to your clinical area/first visit	Yes, No, NA
	C1			PURPOSE T2 assessment is reviewed weekly or where their has been a change in condition or location/service	Yes, No, NA
	C4			Wound chart is completed if PU present	Yes, No, NA
	E5			Patients at risk have a slide sheet that is used to move them	Yes, No, NA



## Due Regard, Equality & Human Rights Analysis

## Title of document:

Pressure Ulcer Prevention and Management Policy

Who will be affected by this work? E.g. staff, patients, service users, partner organisations etc.

All clinical staff and patients under ESHT care

## Please include a brief summary of intended outcome:

That all staff are aware of the principles of the aSSKINg care bundle in order to prevent pressure ulceration of the skin for patients while in our care. It is also the intended outcome that staff are aware of how to report incidents of pressure ulceration via the DatixWEB system and where required through the Safeguarding Adults Alert process.

		Yes/No	Comments, Evidence & Link to main content					
1.	Does the work affect one group less or more favourably than another on the basis of: (Ensure you comment on any affected characteristic and link to main policy with page/paragraph number)							
	• Age	No						
	Disability (including carers)	No						
	• Race	Yes	Update of Section 5.1 to incorporate new Wounds UK best practice statement which refers to 'Addressing skin tone bias in wound care' Best-Practice-Statement-Addressing-skin-tone-bias-in-wound-care-assessing-signs-and-symptoms-in-people-with-dark-skin-tones.pdf (esht.nhs.uk)					
	Religion & Belief	No						
	Gender	No						
	Sexual Orientation (LGBT)	No						
	Pregnancy & Maternity	No						
	Marriage & Civil Partnership	No						
	Gender Reassignment	No						
	Other Identified Groups	No						

2.	Is there any evidence that some groups are affected differently and what is/are the evidence source(s)?	No  Early pressure damage may not be as easily recognised in patients with dark skin tones. Resource document available and included in this Policy Best-Practice-Statement-Addressing-skin-tone-bias-in-wound-care-assessing-signs-and-symptoms-in-people-with-dark-skin-tones.pdf (esht.nhs.uk)
3.	What are the impacts and alternatives of implementing / not implementing the work / policy?	Inconsistent approach to pressure ulcer prevention and management and potential for patient harm if policy not implemented
4.	Please evidence how this work / policy seeks to "eliminate unlawful discrimination, harassment and victimisation" as per the Equality Act 2010?	Applies to all ESHT patients
5.	Please evidence how this work / policy seeks to "advance equality of opportunity between people sharing a protected characteristic and those who do not" as per the Equality Act 2010?	Applies to all ESHT patients
6.	Please evidence how this work / policy will "Foster good relations between people sharing a protected characteristic and those who do not" as per the Equality Act 2010?	Applies to all ESHT patients
7.	Has the policy/guidance been assessed in terms of Human Rights to ensure service users, carers and staff are treated in line with the FREDA principles (fairness, respect, equality, dignity and autonomy)	Applies to all ESHT patients
8.	Please evidence how have you engaged stakeholders with an interest in protected characteristics in gathering evidence or testing the evidence available?	(Ensure you comment and link to main policy with page/paragraph number)
9.	Have you have identified any negative impacts or inequalities on any protected characteristic and others? (Please attach evidence and plan of action ensure this negative impact / inequality is being monitored and addressed).	No



# Policy and Procedure for the use of Sterile Maggots in Wound Management

Document ID Number:	1332
Version:	V4
Ratified by:	Clinical Documentation and Policy Ratification Group
Date ratified:	09 May 2023
Name of author and title:	, Tissue Viability Team Lead Tissue Viability Nurse
Data animinally somittans	Tissue Viability Nurse
Date originally written:	July 2020
Date current version was completed:	December 2022
Name of responsible committee/individual:	: Tissue Viability Team Lead
Date issued:	01 June 2023
Review date:	May 2026
Target audience:	All clinicians involved in Maggot Therapy for patients within East Sussex Healthcare NHS Trust
Compliance with CQC Fundamental Standard	Regulation 12
Compliance with any other external requirements (e.g., Information Governance)	N/A
Associated Documents:	Policy for Wound management and decision cards 2022 Policy and procedures for consent

# Did you print this yourself?

Please be advised the Trust discourages retention of hard copies of the policies and can only guarantee that the policy on the Trust website is the most up to date version

# **Version Control Table**

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1 2012257 (Community document)	April 2006			
V1.0 2013114	June 2013		New company producing maggots, different products available	
V 2.0	August 2016		New guidelines on ordering and updated product guide	Updated appendix and community instructions
V 3.0	July 2020		Updated guidance	Titled policy and updated
V 4.0	December 2022		Changes to available products and px	Updated and simplified the ordering & application guidance

# **Consultation Table**

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
	Tissue Viability Specialist	Dec 2022
	Tissue Viability Specialist	Dec 2022
	Tissue Viability Specialist	Dec 2022
	Tissue Viability Specialist	Dec 2022
	Tissue Viability Specialist	Dec 2022
Vascular Nurse Specialist	Vascular Nurse Specialist	Dec 2022
Mika Dave	Acute Foot & at-Risk Foot Lead	Dec 2022
Pressure Ulcer Steering Group	Pressure Ulcer Steering Group	Jan 2023
Clinical Documentation and Policy Ratification Group		May 2023

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

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## 1. Purpose

The purpose of this policy is to provide guidance for the appropriate use of maggot therapy and the management of patients receiving this therapy.

The policy is designed to support qualified healthcare professionals in managing wound debridement using maggot therapy and it is carried out in a safe and clinically effective manner, acceptable to patients and carers.

# 2. Introduction - What is Maggot Therapy?

Maggot Therapy uses the larvae of the greenbottle fly species *Lucilia sericata* to remove non-viable tissue and bacteria from non-healing, slow to heal or infected wounds. The larvae, which are applied to the wound in a contained dressing, produce proteolytic enzymes that break down any necrotic tissue, slough or biofilm present in the wound: <a href="Home-Making Healing Possible-BioMonde">Home-Making Healing Possible-BioMonde</a>

### 3. Rationale

To provide evidence-based guidelines on the use of maggots and management of patients during this therapy.

Maggot therapy is a method of wound debridement and involves the clinical application of sterile maggots to wounds. Can also be an effective treatment to be used to maintain a clean wound after debridement if a particular wound is considered prone to re-sloughing.

Maggot therapy is for specialist use only. Maggot therapy should only be undertaken by a registered healthcare professional who has received training in the use of maggot therapy and following discussion with the Tissue Viability Nurse (TVN), Vascular Nurse Specialist (VNS). Training will be organized by the TVN or VNS in association with BioMonde (Maggot supplier) clinical trainer.

### 4. Mode of action

Maggots of the green bottle fly, *Lucilia sericata*, have been shown to rapidly remove necrotic tissue from all types of wounds, they feed on dead tissue, cellular debris and serous drainage (exudate) present in sloughy wounds.

Rapid debridement up to 8 days (Mudge e et al 2014)

The feeding action physically breaks up the necrotic or sloughy tissue, which is consumed and digested. The process involves the physical actions of the larvae and proteolytic enzymatic digestion. The maggots of the *Lucilia sericata* do not digest living human tissue, so selective process is one of the major advantages of maggots' debriding, sparing healthy tissue necessary for healing (Gottrup and Jorgensen 2011)

• Biobag is applied like a dressing so is a safe alternative to surgery (Gilead et al 2012)

### 5. Indication for use

Maggot therapy is indicated where the overall clinical decision has been made for rapid debridement of devitalized tissue which is delaying wound healing. To support clinical decision making the Biomonde Larval therapy decision making pathway can be used as a tool (Appendix 1 & 2)

### May be used in:

- Diabetic ulcers
- Venous ulcers
- Arterial/ischaemic ulcers
- Pressure ulcers
- Post-traumatic wounds/ulcers i.e., haematomas
- Amputation sites
- Dehisced and non-healing surgical wounds
- Wounds with osteomyelitis
- Wounds containing MRSA (adapted from Chan et al 2007)

### 6. Contraindications

- Must not be used on wounds that tend to bleed or on wounds close to an exposed major blood vessel
- Complex wounds such as sinuses/fistula should be treated with caution in conjunction with medical supervision
- Dry necrotic tissue/eschar
- Patients on anticoagulants where the relevant clotting marker is not within an acceptable clinical range
- Wounds over adjacent exposed organs or connect into a body cavity

### 7. Considerations

- Pain has been reported to increase at the wound site so needs to be reviewed prior to therapy and during the treatment.
- Where blood supply is poor, maggots can be considered appropriate as a holistic care i.e., management of malodour
- Allergies to adhesive tapes/hydrocolloids
- Weight bearing areas that need to be offloaded i.e., heels and buttocks
- Terminally ill patients (due to negative association with maggets and death)
- Interaction of some topical disinfectants, local anaesthetics and some hydrogels can have a negative effect on maggots so should be removed by irrigating the wound bed prior to the application of maggots.

# 8. Accountabilities

Maggot therapy is for specialist use only. Maggot therapy should only be undertaken by a registered healthcare professional who has received training in the use of maggot therapy and following discussion with the TVN or VNS. GP will only prescribe on request from these specialist nurses or hospital consultant.

# 9. Mode of application

Maggots are sealed within a dressing which is a finely woven pouch containing small pieces of foam that protect the maggots during the early days of treatment, these are known as **Biobags** 

The Biobags vary in size and maggots remain sealed in the dressing throughout the treatment.

Doc ID #1332 - Policy and Procedure for the use of Sterile Maggots in Wound Management

Step 1: Measure

Measure width and length of the wound (Appendix 3)

Step 2: Select BioBag size

There are five sizes of BioBag available to suit all wound shapes and sizes. To ensure a successful and cost-effective outcome the BioBag(s) should be applied to cover the wound and overlap the wound margins.

Step 3: Order

# 10. Prescribing and ordering

Individuals for maggot therapy should be carefully assessed prior to treatment and informed consent obtained.

During this discussion, terms such as 'bio surgery' or 'larval therapy' should be avoided. It must be carefully explained to each patient that they will have sterile live maggots on their wound for up to four days. Patient information leaflets are available for patients, carers, and medical teams (Appendix 7 & 8)

In the acute hospital setting the orders should be written on the patient's prescription chart using the maggots ordering form (Appendix 4) by medical team. Ordering will be by pharmacist direct to BioMonde,

In the community orders will go via the community TVN or VNS in discussion with GP raised on an FP10 by a doctor or registered prescriber (Appendix 5). Ordering should be carried out by the community pharmacist (Appendix 6)

Products do not need to be refrigerated if kept in transit containers until application.

Maggots should be applied by the expiry date for optimal results (within 24hrs of delivery)

# 11. Biobag Application Guide



# **BioBag® Application Guide**

## Storage

- · Keep in transport containers until use
- Do not freeze
- Do not store above 25°C
- · Apply before the expiry date
- · For optimal results apply on the day of delivery

# Viability

- · Check viability before use
- Some movement should be visible
- · Larvae might appear slow or sluggish
- Viable larvae should be a cream to beige colour
- · Report viability concerns within 24 hours of receipt
- · Provide BioMonde a photo/video before discarding

# Preparation

- · Dressing kit or similar
- Saline
- Gauze
- Waterproof skin barrier i.e. zinc paste
- Non-occlusive wound pad(s)
- Non-occlusive bandage, tape, or compression
- BioBag<sup>®</sup>(s)



### **OUR CLINICAL SUPPORT TEAM ARE HERE FOR YOU**

Call our 24/7 Clinical Helpline on 0345 230 6806 E-mail: clinicalsupport@biomonde.com

Order: 0345 230 1810

BM415\_UK\_EN\_01\_0520

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# 12. Step by Step Application guide

# BioMonde<sup>®</sup>

# Step-by-step BioBag® Application



### **OUR CLINICAL SUPPORT TEAM ARE HERE FOR YOU**

Call our 24/7 Clinical Helpline on 0345 230 6806 E-mail: clinicalsupport@biomonde.com

Order: 0345 230 1810

BM415\_UK\_EN\_01\_0520

www.biomonde.com

# 13. Daily care









Remove the soiled outer dressing; including the bandage, tape, wound pad and gauze and discard. Do not remove or discard the BioBag®



Protect the healthy skin surrounding the wound with a thin layer of zinc paste or another skin protection barrier. You do not need to wash the wound.



(3) MOISTEN



Moisten some gauze with saline and place on top of the BioBag®. Do this step even if the wound is wet or there is a lot of drainage present.



Absorb the increasing exudate by placing a non-occlusive surgical wound pad or dry gauze on top of the BioBag® and moist gauze. Only use breathable wound pads.



(5) DRESS



Secure the dressing in the same way that you usually would, using a breathable bandage or tape. You can also use 4-layer compression or hosiery.



Day 4





### **Patient instructions**

In most cases the patient will not need to alter their daily routine however there are certain things to avoid:

- Do not bathe or shower with BioBag on the wound (even with a plastic covering over the dressing)
- Do not apply sustained direct pressure to the wound site
   Avoid standing or lying on the wound
- Do not cover the dressing with anything plastic or occlusive
- If your foot is being treated, consider if the footwear could squash the larvae
- Avoid areas of high heat such as in direct sunlight or in front of a heater

**OUR CLINICAL SUPPORT TEAM** ARE HERE FOR YOU

24/7 Clinical Helpline: 0345 230 6806 Order: 0345 230 1810

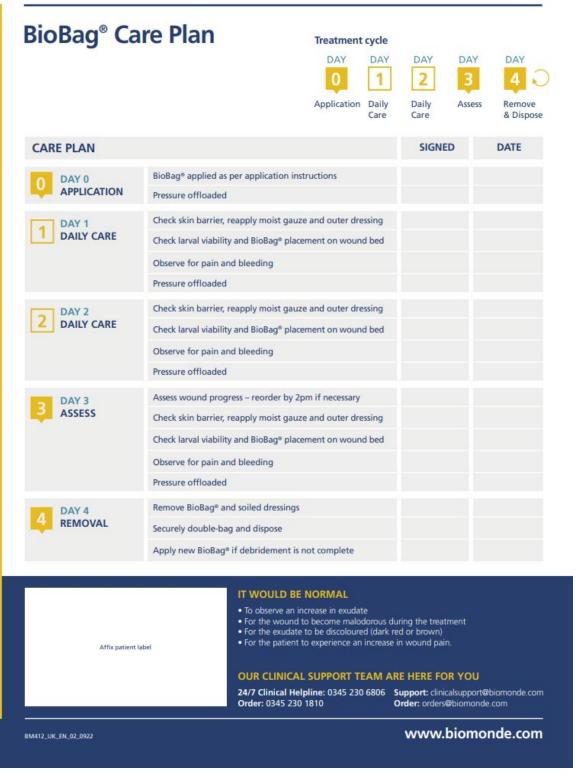
Support: clinicalsupport@biomonde.com Order: orders@biomonde.com

BM412\_UK\_EN\_02\_0922

Making healing possible

# 14. Biobag Care Plan





### 15. Special Considerations

If a patient dies unexpectedly during maggot therapy, the maggots should be removed from the wound prior to the transfer of the patient to the mortuary, Cover wound with adhesive dressing. Place in body bag

If any maggots do escape effort should be made to clean the area around the bed but it is not always possible to prevent some larvae pupating in these circumstances.

However, if any maggots do escape and find a dry cool place in the room they may pupate, and flies will usually hatch 10-14 days later. This is no more of a problem than any other fly. The enzymes in the larvae gut will destroy bacteria.

Bagged maggots may be ineffective or limited in their action, e g a wound with osteomyelitis.

Ensure maggots are all double bagged for clinical disposal. (Appendix 7)

### 16. References

- Chan DC, Fong DH, Leung JY, et al (2007) Maggot debridement therapy in chronic wound care .*Hong Kong Med J 13 (5):* 382-6
- Gilead L, Mumcuoglu KY, Ingber A. The use of maggot debridement therapy in the treatment of chronic wounds in hospitalized and ambulatory patients. J Wound Care. 2012;21(2):78-85
- Gottrup F, Jorgensen B (2011) Maggot Debridement: an alternative method of debridement .Eplasty 11;e33
- Mudge E, Price P, Walkley N, and Harding K. 2014. A randomized controlled trial
  of larval therapy for the debridement of leg ulcers: results of a multicenter,
  randomized, controlled, open, observer blind, parallel group study. Wound Repair
  & Regeneration, Jan-Feb, 22(1); 43-51.

## 17. Acknowledgements

We wish to Thank Wales Tissue Viability Nurse Forum and BioMonde for sharing their Guidelines for Maggot Therapy.

## 18. Competencies and Training Requirements

Maggot therapy is for specialist use only. Application and ordering in the community is by TVN/VNS and in the acute maggot therapy should only be undertaken by a registered healthcare professional who has received training in the use of maggot therapy.

Training will be arranged for individual staff by Specialist Nurses trained in maggot therapy or by the clinical educator from Biomonde.

# 19. Monitoring Arrangements

# **Document Monitoring Table**

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Training	Specialist Nurses BioMonde clinical educator	MYLearn	As required	Individual	Specialist Nurses	Specialist Nurses
Monitoring Arrangements	Tissue viability / Vascular Team	Tracking referrals	As required	Tissue viability / Vascular Team	Specialist Nurses	Specialist Nurses

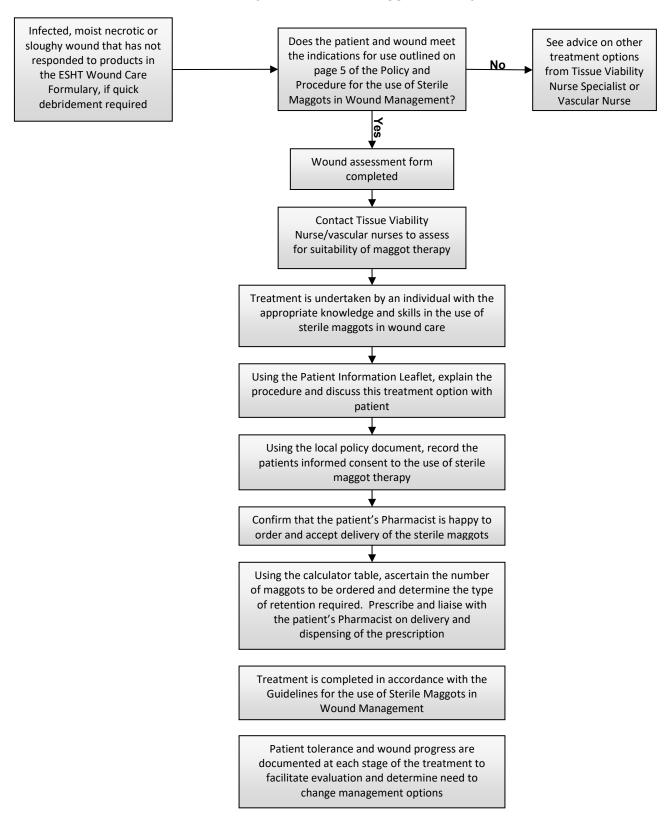
# 20. Equality and Human Rights Statement

This document has been assessed for Equality and Human Rights infringements and it is considered that it does not affect one group less or more favourably than another on the basis of race, ethnic origin, nationality, gender, culture, religion or belief, sexual orientation, age or disability.

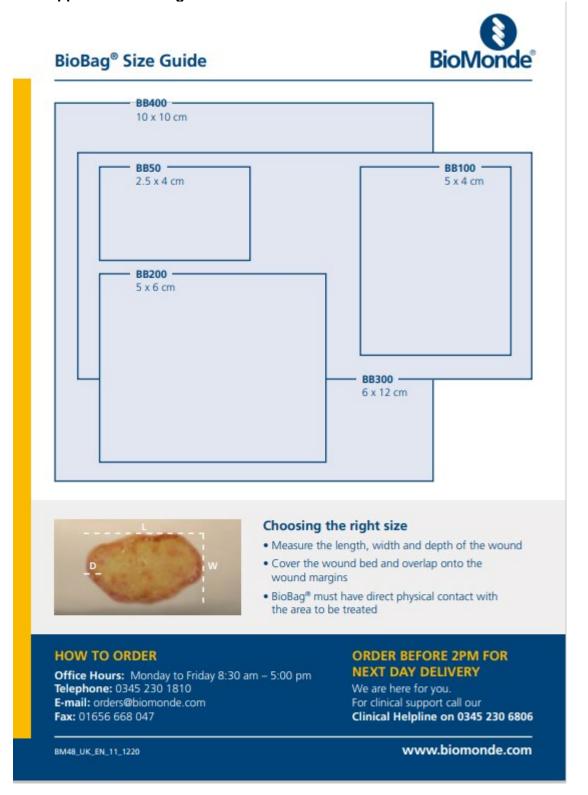
Appendix 1: Biomonde larval therapy decision making pathway

#### **Larval Therapy Decision Making Pathway** WOUND PRESENTATION 8 3/2 (8) IS THERE IS THE WOUND IS THE IS THE WOUND HARD NECROTIC WOUND STATIC? INFECTED? SLOUGHY? TISSUE IN THE (no change in 2 weeks or more) 6 WOUND? IS IT A HAEMATOMA? 868 Soften with alternative methods first Q (A) (%) Are clotting Has the Is a large blood full depth been explored? vessel involved/ factors within therapeutic likely to be range? Yes No ٧ . ? DON'T FORGET! Effective on a wide range Can the patient Consider of wounds, including Pyoderma offload the area alternative Gangrenosum & Calciphylaxsis. continuously? debridement methods No Refer to a specialist for any of the following: Yes **PVD & DIABETES** . Do Not Use in areas that have bled heavily NOTE: in the past or are close to a large vessel especially if it is possible that the artery wall could be Consider Can result in Is heavy growth reduced Larval damaged or necrotic. Larval · Caution should be taken specifically in patients efficacy and present in the Therapy with bleeding disorders or patients on Warfarin. • If the INR is high or unstable prolonged bleeding viability wound? could be a risk Do not use in areas leading to a body cavity. Do not use BioBag if the patient is allergic to any of the materials. **OUR CLINICAL SUPPORT TEAM ARE HERE FOR YOU** Call our Clinical Helpline on 0345 230 6806 E-mail: clinicalsupport@biomonde.com www.biomonde.com BM421\_UK\_EN\_01\_1120

**Appendix 2: Treatment Pathway Flowchart for Maggot Therapy** 



# Appendix 3: Biobag sizes



# Appendix 4: Acute Hospital Maggot order form

# Maggots / Larvae Order Form

# Prescription to be in pharmacy by 11.30am latest for next day delivery

(Deliveries every day Mon – Sat if orders are placed on time)

Date form fille	ed out					
Patient name.						
Ward		Consultant				
Day treatmer delivery p		ven (Contact ward to confirm date if different due to				
	Person who will be applying treatment & contact number					
Prescribers na	ame / signa	ature				
For immedia	te / urgent	action by pharmacy				
arrive in pharr	macy on th a new date	information to the ordering team ASAP, and then dispense the larvae when they be date specified; liaise with the ward staff if the order will not be in on the date can be arranged; please phone the ward to collect the product once it has arrived BioBag dressings				
	Qty 104	<u>Siobag arosonigo</u>				
		Sudocreme required				

# Appendix 5: Community Larvae Prescription Request Form Practice: Please scan onto patient's notes

# Request to be sent to the GP practice at least 3 working days prior to treatment

Patient name	
Address	
Date of Birth	
GP Practice	
Date treatment to be given	
Person who will be applying	treatment & contact number

Name of TVN ordering	
Contact details (phone)	

# Indicate what is required\*

Code	BioBag size	Quantity required
BB50	2.5cm x 4 cm	
BB100	5cm x 4cm	
BB200	5cm x 6 cm	
BB300	6cm x 12cm	
BB400	10cm x 10cm	

<sup>\*</sup>BioBags come supplied with sudocreme, gauze and yellow bags for disposal

Prescription delivery instructions	Please tick
Prescription to be left at surgery for collection by TVN	
Prescription to be forwarded topharmacy at	

# **Appendix 6: Community Pharmacy Order Form**



Dear Pharmacist

You will shortly receive a prescription for Larval therapy (maggots) from

Name of GP practice	

for dispensing at your pharmacy. The larvae used are alive and consequently they have specific handling requirements that need consideration when they are ordered.

Larval therapy is only available on prescription and has a very limited expiry hence the treatment date must be stated on the prescription

- Do not order until you have received a signed prescription (FP10 or electronic)
- Check that the prescription specifies a treatment date.

The treatment can be ordered through BioMonde® on

#### 08452301810

Delivery is available from Monday through to Friday. Order by 2pm for next day delivery (2pm Friday for Monday).

The larvae will be delivered before 12 noon on the delivery day.

- Order as far in advance of the treatment data as possible the supplier will then arrange for delivery on the correct day.
- If ordering at short notice check that the supplier can deliver on the treatment day. If not, do not order; contact the TVN for advice (see details below).
- Arrange for the treatment to be delivered to your pharmacy only

On receipt of the larvae:

Notify the nurse (contact details below) that the larvae have arrived and hold until
collection. Do not deliver the treatment onwards.

### Person who will be applying treatment & contact number

Name of nurse	
Contact details (phone)	

If you are storing the treatment pending collection, please ensure that it is stored correctly in its original packaging at between 6-25°C. DO NOT STORE IN THE FRIDGE

Name of TVN ordering	
Contact details (phone)	

For further information: www.biomonde.com

TVN to fax this form through to the community pharmacy after notifying them about planned treatment Larvae ordering info – Nov 15

These documents will need to be emailed to the Gr surgery

# **Appendix 7: Looking after your Larval Therapy**



### Appendix 8: Patient information guide

### **Patient Information Guide**





Thank you for considering Larval Therapy as a wound debridement option.

We understand that you may have a lot of questions, let us answer them for you.

#### What is Larval Therapy?

Larval Therapy (also known as Maggot Therapy or Biosurgery) is a natural form of wound debridement (cleaning) using the living larvae of the greenbottle fly species called Lucilia sericata. The larvae of the greenbottle fly are safe to use and the treatment has a long and successful history. BioMonde has a modern approach to Larval Therapy and packages the larvae within a sealed dressing called BioBag.

### What is Larval Therapy used for?

Larval Therapy is indicated for the debridement (cleaning) of many chronic and hard to heal wounds. These include lower extremity ulcers (diabetic, venous, arterial and pressure ulcers); surgical wounds and post-traumatic wounds. Debridement is the removal of unviable tissue and bacteria from a wound to allow progression through the wound healing process.





### **How does Larval Therapy work?**

Larvae do not have teeth so they do not bite or chew, instead they produce and release liquid secretions onto the wound. The secretions break down the devitalised tissue and bacteria into a liquid which the larvae ingest as nutrition.

Making healing possible

# **Patient Information Guide**

### Why should I use Larval Therapy?

Larval Therapy is a common treatment for non-healing wounds because it is often considered as being a quick and Larval I herapy is a common treatment for non-healing wounds because it is often considered as being a quick and effective way to help a wound progress towards healing. Your healthcare professional may have identified Larval Therapy as being an appropriate treatment option for you because Larvae are thought to be able to remove things from the wound that are slowing down wound healing or causing infection such as necrotic tissue and bacteria. Even though your healthcare professional may have identified you as being a suitable candidate for this treatment you should take time to ask questions, read this guide and hopefully decide that this is a treatment you are you should take til comfortable with.

### Where do the larvae come from?

BioMonde have been producing larvae for wound care since 1994. BioMonde has specialist pharmaceutical facilities in the UK and Germany which house the greenbottle fly Lucilia sericata. The life cycle is nurtured to allow the creation of the fly larvae which are produced using an aseptic process. BioMonde are dedicated to your safety and work to strict quality standards.

### Will I feel the larvae on my wound?

Most people are unaware of the larvae's presence, although it would be normal to feel a tickling, pulsating or tingling sensation. Remember, with BioBag, the larvae will be contained within the dressing during treatment. Some patients, particularly those with poor circulation or painful/sensitive wounds, can experience an increase in pain during the treatment but this is typically controlled with pain relieving medication.

### How big are the larvae?

It might surprise you to hear that the larvae of the it might surprise you to hear that the larvae of the greenbottle fly species we use, Lucilia sericata, are very small. Smaller than larvae you may have seen on television and definitely smaller than the image you will have in your mind. They are only a few millimeters in length when they are first applied to your wound and they grow no larger than 12mm after four days.

We hope that this guide has answered some of your questions and wish you every success with your Larval Therapy treatment.

For further information, please visit www.biomonde.com

### What does the treatment process entail?

BioBag dressings are very easy to use and are simply placed on top of your wound much like a conventional dressing. They are then covered with moist gauze and a breathable wound pad and the dressing is secured using a bandage or tape. From the outside it should look the same as your usual dressing. Each treatment stays in place for up to four days and the outer dressing is changed daily.

Larval Therapy can be applied in your home, in any healthcare facility or outpatient clinic. On average one to three treatments are needed to achieve successful wound cleaning. Your healthcare professional should assess your wound at application and at the end of the treatment to ensure successful debridement and that the correct follow-on treatment is used.

### What should I consider during treatment?

What should I consider during treatment Whilst it's possible to carry out most normal activities during treatment, you should ideally avoid bathing or immersing the wound in water; sitting with the wound too close to a source of heat (e.g. fire or radiator); and sitting or walking on the wound. You may also notice some changes in the wound, including a dark red or pink discharge and a characteristic smell amongst the wound (particularly if there is a lot of dead tissue). However, these changes are nothing to worry about and are simply caused by the activity of the larvae.

# Appendix 9: Community practice guidelines for dealing with requests for Larval Therapy

Larval therapy (maggots) is an alternative method for removing dead tissue from all types of wounds. The larvae used are purpose-bred and sterile and come from a single supplier in the UK – BioMonde®. As the larvae are alive, they have specific handling requirements that need consideration when they are prescribed.

Only a Tissue Viability Nurse (TVN) from ESHT or Healogics can make a request to a GP practice for larvae to be prescribed.

TVNs are specialists in wound care and have the expertise and training to use larvae effectively.

- Requests to the practice should be made using the ordering form below.
   Do not accept requests for larvae where this form has not been used.
- Check that the nurse ordering the prescription is a TVN.
   Do not issue a prescription if the requestor is not a TVN. Refer back to them asking them to discuss with the TVN.
- Check that the order form has been fully completed and the treatment date is stated.
   Do not issue a prescription without knowing the treatment date.

The larvae are supplied in net bags called BioBags which are available in different sizes to accommodate different wound sizes and depth. In some cases, more than one bag may be required.

- Check that the order clearly states the number and size of BioBags required. Contact the requestor if this information is not clear
- Select the appropriate item(s) on the computer. Freetype the treatment date in the directions field so that it is printed on the prescription.
- Print the prescription and scan the request form into the patients record
- Send the prescription for signing with the request form attached for information.

It is important that the community pharmacy has sufficient time to order the larvae from the supplier. **Orders must be placed by 2pm on the day prior to the treatment date.** 

- If the prescription is to be forwarded to a community pharmacy, contact them to advise them that the prescription is ready for collection. If it is being collected as part of a batch, flag to the collector.
- If the prescription is being collected by the TVN, contact them to advise that the prescription is ready for collection.
- If the prescription is delayed and there is any doubt that the larvae cannot be ordered in time, contact the TVN for advice

# Appendix 10: Due Regard, Equality & Human Rights Analysis

# **Equality Impact Assessment Form**

# 1. Cover Sheet

Please refer to the accompanying guidance document when completing this form.

Strategy, policy or service name	Policy and Procedure for the use of Sterile Maggots in Wound Management
Date of completion	May 2023
Name of the person(s) completing this form	
Brief description of the aims of the Strategy/ Policy/ Service	Aim of the Policy is to provide guidance within ESHT for the appropriate use of maggot therapy and the management of patients receiving this therapy. The policy is designed to support qualified healthcare professionals in managing wound debridement using maggot therapy and it is carried out in a safe and clinically effective manner, acceptable to patients and carers.
Which Department owns the strategy/ policy/ function	Tissue Viability
Version number	V 4.0
Pre Equality analysis considerations	Access to all Staff involved in patient wound management
Who will be affected by this work?	ESHT staff and patients
E.g. staff, patients, service users, partner organisations etc.	
Review date	September 2023
If negative impacts have been identified that you need support mitigating please escalate to the appropriate leader in your directorate and contact	To whom has this been escalated? N/A

the EDHR team for further discussion.	
Have you sent the final copy to the EDHR Team?	Patient Documentation and Policy Ratification Group

# 2. EIA Analysis

	©	Evidence:				
Will the proposal impact the safety of patients', carers' visitors and/or staff?  Safe: Protected from abuse and avoidable harm.	Positive	The policy s of maggot the professional	herapy by	•		ation
Equality Consideration		Race	Gender	Sexual orientation	Age	Disability & carers
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)		Gender reassignment	Marriage & Civil Partnership	Religion and faith	Maternity & Pregnancy	Social economic

Is the proposal of change effective?  Effective: Peoples care, treatment and support achieves good outcomes, That staff are enabled to work in an inclusive environment. That the changes are made on the best available evidence for all involved with due regards across all 9 protected Characteristics	Positive	Training will registered h maggot ther team and B	ealthcare   apy, supp	profession orted by th	als in the ne tissue v	use of
Equality Consideration		Race	Gender	Sexual orientation	Age	Disability & carers
Highlight the						
protected characteristic impact		Gender reassignment	Marriage & Civil Partnership	Religion and faith	Maternity & Pregnancy	Social economic
or social economic impact (e.g.						
homelessness, poverty, income or education)						
What impact will this have on people receiving a positive experience of care?	Positive	Staff will ha skills and k informed c therapy	nowledge	that will e	enable sa	fe and

Equality Consideration		Race	Gender	Sexual orientation	Age	Disability & carers
Highlight the protected characteristic impact		Gender reassignment	Marriage & Civil Partnership	Religion and faith	Maternity & Pregnancy	Social economic
or social economic impact (e.g. homelessness, poverty, income or education)						
Does the proposal impact on the responsiveness to people's needs?	Positive	The Policy of contraindical careful asset therapy to p	itions for p essment ar	atient use	, and pron	
Equality Consideration		Race	Gender	Sexual orientation	Age	Disability & carers
Highlight the protected characteristic impact		Gender reassignment	Marriage & Civil Partnership	Religion and faith	Maternity & Pregnancy	Social economic
or social economic impact (e.g. homelessness, poverty, income or education)						
What considerations have been put in place to consider the organisations approach on improving equality and diversity in the workforce and leadership?	Positive	Training and who wish to Section 18 of and training	develop thof the	nis wound y refers to	care tech	nique.

Equality Consideration		Race	Gender	Sexual orientation	Age	Disability & carers
Highlight the protected characteristic impact		Gender reassignment	Marriage & Civil Partnership	Religion and faith	Maternity & Pregnancy	Social economic
or social economic impact (e.g. homelessness, poverty, income or education)						
Access						
Could the proposal imp	act positiv	ely or negativ	ely on any	of the foll	lowing:	
Patient Choice	Positive	The policy of mode of act contraindica with this info patients so proceed with	ion, indica itions, and ormation st that they c	tions and applicatio	n guide fo able to int	r staff, form
• Access	Positive	Assessmen Competent		ill be unde	ertaken by	
Integration	Positive	The policy is staff within I if requested	ESHT, with	-		
Equality Consideration		Race	Gender	Sexual orientation	Age	Disability & carers
Highlight the protected characteristic impact		Gender reassignment	Marriage & Civil Partnership	Religion and faith	Maternity & Pregnancy	Social economic
or social economic impact (e.g. homelessness, poverty, income or education)						

Engagement and Involvement How have you made sure that the views of stakeholders, including people likely to face exclusion have been influential in the development of the strategy / policy / service:	Positive	Consultation group Vascular nu Acute foot 8	rse specia	llists	ılcer steer	ing
Equality Consideration		Race	Gender	Sexual orientation	Age	Disability & carers
Highlight the						
protected characteristic impact		Gender reassignment	Marriage & Civil Partnership	Religion and faith	Maternity & Pregnancy	Social economic
or social economic impact (e.g.						
homelessness, poverty, income or education)						
Duty of Equality  Use the space below to provide more detail where you have identified how your proposal of change will impact.	Choose : Positive Neutral Negativ e	The policy gassessment application of that staff will and undertapatients car competent s	t, selection of maggot I take prof lke further I be treate	and proce therapy, a essional a training if	edure for nd consid ccountabi needed, s	ers lity o that
Characteristic	Rating	Description	ı			
	<b>089</b>					
Race	Positiv e	This policy I qualified sta race	-	-		
Age	Positiv e	This policy I qualified sta Age	•	•		

Disability and Carers	Positiv e	This policy has a positive impact for all ESHT qualified staff and patients regardless of their disability or long-term health condition. However, consideration needs to be taken for Terminally ill patients: see section 7. Considerations
Religion or belief	Positive	This policy has a positive impact on all ESHT qualified staff and patients who wish to observe religious practices and those that don't
Sex	Positive	This policy has a positive impact on ESHT qualified staff and patients no matter what their sex is.
Sexual orientation	Positive	This policy has a positive impact on ESHT qualified staff and patients no matter what their sexual orientation is.
Gender re- assignment	Positive	This policy does not negatively impact on those that are transitioning from their gender assigned at birth to another gender.
Pregnancy and maternity	Positive	This Policy does not negatively impact on ESHT qualified staff or patients with pregnancy, maternity, and paternity rights
Marriage and civil partnership	Positive	This policy does not have a negative impact on ESHT qualified staff or patients marital or civil partnership status

# **Human Rights**

Please look at the table below to consider if your proposal of change may potentially conflict with the Human Right Act 1998

Articles		Y
A2	Right to life	N
А3	Prohibition of torture, inhuman or degrading treatment	N
<b>A4</b>	Prohibition of slavery and forced labour	N
<b>A5</b>	Right to liberty and security	N
A6 &7	Rights to a fair trial; and no punishment without law	N
<b>A8</b>	Right to respect for private and family life, home and correspondence	N
A9	Freedom of thought, conscience and religion	N
A10	Freedom of expression	N
A11	Freedom of assembly and association	N
A12	Right to marry and found a family	N
Protocol	s	
P1.A1	Protection of property	N
P1.A2	Right to education	N
P1.A3	Right to free elections	N



# **Policy for Wound Management and Decision Cards**

Document ID	1872
Version:	V2
Ratified by:	Clinical Documentation and Policy Ratification
-	Group
Date ratified:	08 November 2022
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Associated Documents:	Policy and procedure for Consent
	ESHT Guidelines for assessment of Pain in
	Adult Inpatients
	Nutrition Policy for Adults
	Eat well, heal well: Wound healing and nutrition-
	patient information
	ESHT Guidelines of use of Maggot Therapy
	ESHT Guidelines for Negative Pressure
	Therapy
	ESHT Guidelines for Pressure Ulcer Prevention and Management
	ESHT Pressure Ulcer Prevention Strategy
	2019-21
	ESHT Leg Ulcer Management
	Tissue Viability Service and referral pathway

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# **Version Control Table**

Version number	Date	Author	Reason for Change	Description of Changes Made
Version 1	Aug-19		New Document	New Document
Version 2	Aug 2022		Updating with latest NHS strategy and guidelines	Addition of National wound care strategy NWCP guidance and updating Dark skin tones and pathways

# **Consultation Table**

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
ESHT Podiatry		20/3/2019
ESHT Vascular Nurses		20/3/2019
	ESHT Assistant Director of Nursing –	20/3/2019
	Corporate	
Pressure Ulcer Steering group		23/7/2022

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

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### 1. Introduction

The policy has been developed by East Sussex Healthcare NHS Trust (ESHT) Tissue Viability team to support all clinicians in the clinical decision-making process in their wound care practice, reflecting current research and evidence based expert opinion.

The policy has been produced for use by any member of the healthcare team. It is not intended as a substitute for professional judgement but to support the practitioner in making an informed decision relating to management of the patients wound.

The Tissue Viability Service for East Sussex Healthcare NHS Trust covers the two acute hospital in-patient sites and the Hastings & Rother Clinical Commissioning Group (CCG) area.

A Wound Care formulary has also been developed in partnership with the medicine's management team. It is to be used in conjunction with this policy to ensure best practice, cost effectiveness and minimise the potential for inconsistency of care locally.

In most cases wounds heal without a need for complex interventions and the policy will provide the healthcare professional with details on normal wound healing and measures that can be taken when these fail.

The abbreviation TVN is used throughout the policy and stands for Tissue Viability Nurse.

# 1.1 Population

East Sussex Healthcare Trust (ESHT) is responsible for the delivery of healthcare services to a population of over half a million people, with a 7% greater number of people over the age of 65 than the national average.

The East Sussex population is projected to increase by 1.6% by 2026 mainly due to net migration. The growth is projected to be in the older age groups with a significant growth of those aged 65 years and over by 31%, and those aged 75 and over by 17% (Joint Strategic needs assessment 2015 JSNA).

# 1.2 Current Situation

It is estimated that the annual cost to the NHS of managing patients with wounds is between £4.5 billion- £5.1 billion (Gary et al 2018). Of the 2.2 million people with a wound, 29% have an acute wound related to an abscess, surgery, or trauma. The other 71% are chronic wounds, such as diabetic foot ulcers, pressure ulcers and leg ulcers. Only 79% of these wounds heal within the 12 months and for the 21% that fail to heal, there is considerable patient suffering and NHS cost.

The National Wound Care Strategy Programme (NWCSP) has been developed from previous initiatives and addresses the issue of sub-optimal wound care. Evidence points to marked unwarranted variation in UK wound care services, underuse of evidence-based practices and overuse of ineffective practice (NHS Long time plan 2019)

### 2. Purpose

## 2.1 Rationale

Evidence based knowledge and skills related to wound care management are crucial in meeting the needs of patient/client safety, effectiveness, and efficiencies.

The policy for wound management provides up to date evidence to support standardisation of care and encourage best practice to contribute to improved patient outcomes.

The formulary of wound care products promotes rational selection by the healthcare professional. Suggestions for wound dressings are given for each wound type however, it is the decision of the individual which dressing to use.

To ensure appropriate management of all wounds.

To provide details on when and whom to refer onto for complex wounds that require specialist input i.e. diabetic foot, lymphoedema.

To promote and co-ordinate a systematic approach to wound management, addressing system control and maintain the individual's quality of life recognising that complete wound healing is not always achievable.

## 2.2 Scope

All ESHT Healthcare professionals who have direct patient contact and/or make decisions concerning wound care and treatment of individuals/patients.

### 2.3 Accountabilities and Responsibilities

Nurses and midwives that have clinical competence in wound management across hospital and community healthcare settings play a vital role in the frontline clinical care by promoting quality and continuity of care that enables patients/clients to be treated effectively and efficiently in the healthcare setting most appropriate to their needs.

There is an expectation that this wound care policy is used along with the clinician's clinical judgement and knowledge when applying the general principles and

recommendations in this document. Recommendations may not be appropriate in all circumstances and must consider the individual patient and available resources.

# 2.4 Challenges

Wound healing is a dynamic process and normal wound healing occurs in a precise and timely manner. Wound management is dynamic and is dependent on the clinician's ability and skill in assessing, planning care, and evaluating outcomes.

Early focused treatment of wounds that fail to respond to standard care may reduce the burden of wounds that become chronic. The aim of this policy is to support clinicians to have appropriate knowledge to deliver its objectives in maximising the level and quality of service delivery at an affordable cost.

It is recognised that no single healthcare discipline can completely meet the complex needs of those presenting with challenging wounds, therefore it essential the clinicians from all disciplines are aware of the standards and prevention strategy (O'Neill 2006).

The National Wound Care Strategy Programme (NWCSP) commissioned by NHS England and NHS Improvement seeks to improve care for people with wounds by developing recommendations which support excellence in preventing, assessing, and treating people with wounds to optimise healing and minimise the burden of wounds for patients.

NWCSP Clinical resources and recommendations relating to Pressure ulcers, Lower limb ulcers, and Surgical wounds can be found online:

<u>Surgical-Wound-Recommendations-WEB-25Feb21-1.pdf (nationalwoundcarestrategy.net)</u>
<u>Lower-Limb-Recommendations-WEB-25Feb21.pdf (nationalwoundcarestrategy.net)</u>
Pressure Ulcer | National Wound Care Strategy Programme

# 3. The physiology of wound healing

#### 3.1 Acute wounds

Acute wounds will generally proceed through an orderly and timely process to produce a healed wound which has anatomic and functional integrity. However, there are physiological factors which may enhance or impede wound healing.

#### 3.2 Chronic wounds

Chronic wounds are defined as those whose healing is impaired. The inflammatory phase is dysfunctional due to intrinsic and extrinsic factors that impact on the person, the wound, or the healing environment (Swanson et al 2015).

Some of the basic differences (excluding the microbiological/cellular differences) are:

Acute	Chronic
Short duration	Unhealed within 6 weeks of formation
No underlying pathology	Underlying pathology
Usually heals without complication	Prolonged inflammatory stage
Acute wound fluid supports cell proliferation	Variety of complications may arise
	Chronic wound fluid does not support cell proliferation

Most models of wound healing suggest that the mechanics of dermal wound healing fall largely into four overlapping phases:

#### **Haemostasis**

Bleeding starts the process of haemostasis. Blood vessels contract, platelets aggregate, and a clot is formed. Leucocytes are attracted to the injured area.

#### Inflammation

Prostaglandins and proteins are released, which cause vasodilation and inflammation. Neutrophils (whose function is phagocytosis of bacteria) and macrophages (which control the healing process) proliferate in the wound.

#### **Proliferation**

New supporting tissue is formed like a scaffold, along with new blood vessel development, which is known as angiogenesis, and the wound begins to contract. New skin cells emerge from the dermal edge and hair follicles, slowly bringing the wound edges together.

#### Maturation

Maturation or remodelling is the end stage of the wound healing process. It takes place soon after the wound has closed. This stage may continue for a couple of years and involves repair of the dermal tissues to improve their tensile strength.

### 3.3 Modes of healing

**Primary Intention** is when the wound edges can be brought together, e.g. a surgical wound which is sutured, clipped, or glued. The first three phrases of healing are usually short, but scar maturation may take a few months, up to two years.

**Secondary Intention** occurs when the wound edges cannot be approximated e.g. Leg ulcer. This wound type heals by a combination of proliferation and wound contraction. The granulation and epithelisation phases of this type of wound may take months to complete.

**Tertiary Intention** also known as delayed primary intention. The primary intention wound is left open to allow for drainage, to compensate for major compartment pressure, or to control major contamination with the intention of undergoing additional surgery.

## 3.4 Factors that affect wound healing

Area	Factors	
Patients	<ul> <li>Aetiology</li> <li>Allergy</li> <li>Medication</li> <li>Psychosocial status</li> <li>Patient Choice</li> <li>Lifestyle choice: smoking, alcohol, drug misuse</li> <li>Palliation</li> <li>Pain</li> <li>Age</li> </ul>	<ul> <li>Co-morbidity e.g. diabetes, auto-immune disease, lymphoedema, venous hypertension, reduced arterial circulation, frequent hyperglycaemia</li> <li>Tissue hypoxia i.e. hypertension, low BP</li> <li>Concordance</li> <li>Nutritional status: consider nutritional extremes such as malnutrition, obesity</li> </ul>
Wound	<ul> <li>Duration</li> <li>Size</li> <li>Ischaemia</li> <li>Inflammation</li> <li>Infection</li> <li>Anatomical site</li> <li>Treatment response</li> <li>Trauma</li> </ul>	<ul> <li>Peri-wound, dermatology problems,</li> <li>i.e. allergy, excoriation, varicose eczema</li> <li>Pain</li> <li>Presence of slough/necrotic</li> <li>tissue/eschar</li> <li>Hypergranulation</li> <li>Unrelieved pressure</li> </ul>
Care Provision	<ul><li>Skill and knowledge</li><li>Care environment</li></ul>	Healthcare system

#### 4. Wound Assessment

An accurate and timely wound assessment within a holistic patient assessment underpins effective clinical decision making. It will form the basis for wound care practice.

It enables appropriate clinical diagnosis and goal setting for the management of the wound in order to improve patient outcomes and reduce morbidity and costs (Posnett et al 2009).

#### 4.1 Baseline information

A systematic and standardised approach to the assessment is required for baseline information against which the wounds progress can be measured. Recording of the size, parameters and use of photography are useful baseline indicators.

#### Minimum data:

Wound	Patient assessment
Type of wound and aetiology	Past medical/surgical history
Location of wound	Current and past drug therapies
Duration of wound	Current and past wound treatments/therapies
Description of Exudate	Patients personal beliefs/choices
Condition of the wound bed	Identification of factors that have potential to increase risk of further damage i.e. Pressure
Size of the wound (measurements)	Cognitive ability
Condition and sensation of peri-wound skin	Patients personal beliefs/choices
Presence of infection	
Presence and nature of pain	
Objective of the wound healing	

# **4.2 Principles of Wound Assessment**

- Diagnose the aetiology (type) of the wound\*
- Identify and address any issues that may delay healing (i.e. pathological, nutritional, or Social problems associated with wound healing)
- Record the wound details to provide a baseline against which planned interventions can be measured
- Set specific and realistic goals based on assessment
- Determine dressing regime
- Alleviate other problems i.e. pain

#### \*Possible aetiologies include:

- Leg ulceration (venous, arterial, mixed)
- Pressure Ulceration
- Malignancy / Fungating Wounds
- Inflammatory causes
- Vasculopathies
- Burns/scalds
- Lacerations
- Post-surgical wounds
- Diabetic foot

Issues that may delay wound healing and require addressing include (but not limited to) – Refer to Section 3.4

Specific and realistic treatment aims may be (but not limited to):

Reduce wound pain	Promote epithelialisation
Reduce pressure	Reduce microbial load (infection)
Debride slough	Rehydrate/protect Peri-wound skin
Manage exudate	Optimise nutrition
Promote granulation	Remove Biofilm

In 2021 Wounds UK published a best practice statement for addressing skin tone bias in wound care: <u>Best-Practice-Statement-Addressing-skin-tone-bias-in-wound-care-assessing-signs-and-symptoms-in-people-with-dark-skin-tones.pdf (esht.nhs.uk)</u>

The document highlights the lack of evidence around skin tone in wound care and recommends that assessment should include awareness of skin tone in order to monitor any changes to the patients skin. Pressure ulcers in dark skin are more likely to be diagnosed with higher category of damage due to lack of accurate assessment and early identification (Oozageer 2017). White skin bias has been identified with the language focusing on the 'redness' which may differ in the presentation depending on skin tone. If bias is created patients with dark skin tones may not receive accurate assessment and diagnosis.

When completing the wound assessment, it must be tailored to our individual patient, so we need to consider:

- What is the wound/peri wound skin like in comparison to the surrounding skin?
- Does the skin feel warm/cool, are there changes in temperature?
- Does the skin feel spongy, firm to touch?
- Is there swelling or inflammation?
- Texture changes in the skin?
- Overall condition of the skin?
- Pain, itchiness or change in sensation?

Dependant on where the wound is located, there may be specific challenges to assessment. As skin tone may vary across different anatomical locations i.e. dark skin the soles of the feet are generally much lighter

#### 4.3 ESHT wound assessment documents

Appendix B is the wound assessment tool for use in the acute setting. The wound assessment for community care can be found via Systmone. These standardised and comprehensive wound assessment tools ensure consistency across ESHT. If not completed accurately will lead to:

- Poor wound assessment and management plan, therefore failing to accurately identify abnormalities of healing.
- Inappropriate and poor dressing choice, leading to poor management of i.e. exudate levels causing maceration and further skin breakdown.
- Failure to provide appropriate pressure relief will contribute to tissue breakdown.
- Incorrect assessment of objective i.e. ischaemic wounds where revascularization is the treatment not the dressing.
- Where healing is not achievable and the aim of wound care is palliation, i.e. fungating breast.
- Lack of appropriate specialist referral.

#### 4.4 Wound Cleansing

Aseptic Non-touch technique (ANTT) is the guideline to follow when undertaking invasive tasks such as inserting a urinary catheter, intravenous device, or dealing with an acute surgical wound site.

This technique should also be used when dealing with exposed bone and wounds caused by trauma where dirt or grit may be within the wound bed, and on application of Negative Pressure Wound Therapy.

For further information see: Aseptic Non Touch Technique (ANTT) Policy – http://nww.esht.nhs.uk/wp-content/uploads/2018/08/01493 P.pdf

A clean technique is a safe approach to chronic wound management.

Wound cleansing may be advocated to remove contaminants in the following instances:

- To remove visible debris after a wound has occurred to aid visual assessment
- To remove excess slough and exudate
- To remove any remaining dressing material
- Prior to obtaining a microbiology swab

The timing, frequency, and type of solution for wound cleansing should be based on the individualised wound assessment and plan.

## 4.5 Cleansing solutions

- In non-sterile (clean) procedures such as leg ulcer management tap water can be used to clean. If washing in a bowl, lining with clean plastic disposable bags is recommended.
- For Sterile wounds or those at risk of infection sterile 0.9% normal saline solution for wound cleansing should be used.
- In infected, colonised, critically colonised, chronic, or static wounds anti-microbial cleansing fluid may be used to clean the wound. This can assist in management of
- bacterial burden and biofilms. For disruption of biofilm and mechanical debridement the use of monofilament pads or wipes should be considered (See Debridement <u>Section 9</u>)
- Cleansing or rehydration of necrotic tissue on diabetic feet should be avoided until assessed by a relevant specialist.

#### 4.6 Method of cleansing

Irrigation is the cleansing mechanism recommended for removal of contaminants. Scrubbing causes pain, local tissue oedema, which decreases host defences.

However, vigorous cleansing may be necessary to remove grease and dirt from traumatic wounds as if left in situ can cause scarring and a focus for infection.

#### 5. How to measure a wound

Providing baseline information is required to aid decision making and continuous measurement will help predict healing times in an objective manner (Fletcher 2010).

#### Methods:

• **Greatest length and width** of the wound are measured across the diameter of the wound, from wound edge to wound edge.

- **Clock:** the face of the clock is used to guide measurement. The 12 o'clock reference position is towards the head of the body and measurements are obtained from 12 to 6 o'clock and from 9 to 3 o'clock.
- Depth should be included in both methods to provide a 3-dimensional measurement of the wound. Undermining and tunnelling using a depth indicator or wound swab with the clock method of recording.

Access to a wound ruler is currently available in the trust dressing packs. Other recording tools may include acetates, surface contour tracing, depth indicators, and wound swabs. For more complex wounds, ultrasound and sonogram may be requested by senior clinicians.

It is important that a consistent measurement methodology is used for each wound and the clinician is competent in this method.

Please note patient positioning may alter internal structure of the wound therefore altering measurements, document patient position at time of measurement.

### 6. Wound Photography

A clinical illustration is one that depicts any physical characteristic, which a patient presents in confidence to a member of the health care team. This is made as a record for a medical practitioner and gives visual information. Photographs are an important component of effective wound assessment. This method achieves repeated views over time, adding objective visual confirmation to the written record.

The Acute clinical photography department can be contacted in hours to photograph wounds for in-patients, they are then stored on ESHT image database 'Henry'.

With consent photos can be taken by ward staff for nerve centre to record simple wounds. If complex or require other speciality onward referral i.e. Plastic/burns via TRIPS. Request Trust photographer so an accurate record of site, size and position of body can be viewed.

For community patient's verbal agreement, then documentation in patient notes is current accepted practice. Photos then uploaded onto Systmone, and promptly removed from your device. For further information please see ESHT: Policy and procedure for consent – <a href="http://nww.esht.nhs.uk/wp-content/uploads/2018/08/01269">http://nww.esht.nhs.uk/wp-content/uploads/2018/08/01269</a> P.pdf

Personal cameras, phones and personal memory sticks should not be used. ESHT encrypted devices are to be used.

#### 7. How to take a wound swab

Swabs of the wound are usually collected so potential pathogens can be identified, isolated, cultivated and then characterised.

- Check identity of the patient.
- Explain the procedure and why it is being performed.
- Gather all relevant equipment.
- Wash hands and apply appropriate apron and gloves.
- Cleanse/irrigate the wound before swabbing. (This removes spurious bacteria that can be associated with non-pathogenic bacteria).
- Take the swab from the *deep or undermining tissue*, as close to the wound bed as possible.
- Where possible, submit actual tissue samples.

- A specimen of pus is more valuable than a pus swab.
- Keep at room temperature.
- If Wound swab is for screening purposes, swab prior to cleansing to detect colonisation.
- If wound bed is dry moisten swab with sterile saline before taking the swab.
- Take the swab using a zig zag motion across the wound bed. Simultaneously rotate the swab between the fingers.
- Sample the whole wound surface.
- Place swab into the transport tube.
- Continue with redressing the wound with clean or aseptic non touch technique as required.
- Complete microbiology form; ensure to include relevant and detailed information of the
  patient and the reason for the swab. Include as much relevant information to guide the
  laboratory when testing the sample. Include whether the patient is on a course of
  antibiotics.
- Inform patient of likely timeline of results.
- Ensure sample is sent to the Laboratory using relevant methods whether hospital or community based.
- If being stored follow manufacturers instruction for storage.
- Follow up results when appropriate.
- Document all care and date/time of swab taken.

#### 8. Debridement

Debridement is an essential aspect of wound bed preparation (Ayello et al., 2016; Gray et al., 2011; Wounds UK, 2013). Debridement is 'the act of removing necrotic material, eschar, devitalised tissue, serocrusts, infected tissue, hyperkeratosis, slough, pus, haematomas, foreign bodies, debris, bone fragments or any other type of bioburden from a wound with the objective to promote healing' Strohal et al (2013:4).

Non-viable tissue acts as a physical barrier to healing. It can be a host for bacteria and contributes to a prolonged and altered inflammatory state. It delays tissue proliferation, epithelial migration and prevents accurate assessment to the extent of tissue damage. Appropriate removal progresses a wound to the normal path of healing.

Comprehensive assessment is paramount and the foundation of sound decision making (Gray et al., 2011). Many factors need consideration to inform the choice of debridement; this includes aetiology of the wound, perfusion of the tissue, patient's co-morbidities, patient choice, pain levels, surroundings, and skill of clinician (Attinger, 2006; Strohal et al, 2013; Gray et al., 2011).

Practitioners not skilled or competent to assess or apply the appropriate method of debridement need to refer on to those who are.

High risk areas that require caution and referral to specialist services for an MDT approach include;

- Face, hands, feet, genitalia
- Ischaemic limbs
- Wounds were malignancy is suspected
- Origin and diagnosis unknown
- Wounds on patients that cannot give informed consent or those in the last days of life
- Patients with blood clotting disorders
- Patients with inflammatory disorders such as Pyoderma Gangrenosum

The risks with ischaemic wounds and the need to re-vascularise first as the normal tissue beneath will die when debrided. Eschar generally does not need to be debrided if it is firmly attached, no drainage, no inflammation or tenderness around the wound (Steed 2004).

#### 8.1 Methods of Wound Debridement

#### **Autolytic**

Autolytic debridement is the natural process of removing non-viable tissue through which the body's own enzymes and moisture hydrate, soften and liquefy necrotic or sloughy tissue (Wounds UK 2013). Certain dressings promote this process by providing a balanced moist environment which facilitates and can speed up this natural process of debridement.

The general consensus is that autolytic debridement is a relatively safe option, painless but can be slow. It can be used by generalist and specialist (Gray et al., 2011; Strohal et al., 2013; Wounds UK, 2013). Its lack of speed to debride needs consideration due to the risk of spreading infection in certain wounds. It can also lead to maceration of the peri-wound if used incorrectly. This method can supplement other methods of debridement i.e. pre larvae or sharp debridement.

#### Mechanical

The application of a wet dressing (usually gauze) that dries out and therefore adheres to the top of the wound bed, so on removal debrides the wound. Debridement using a monofilament pad is a relatively new form of mechanical debridement. It is the preferred choice in the UK when compared to the wet to dry gauze approach (Strohal et al., 2013) as there appears to be less risk of pain and damaging healthy tissue. NICE guidance (2014) advocates the use of a monofilament pad, in particular with hyperkeratosis and chronic sloughy wounds, based on simplicity, safety, cost and speed to debride.

### **Biological (Maggot Therapy)**

Involves the application of larvae to remove moist, devitalised tissue from the wound bed. They are highly selective and rapid. The maggots have 2 hooks which penetrate the tissue allowing the secretion of enzymes to semi-liquefy non-viable tissue so it can be ingested.

They are costly compared to other forms of debridement and require planning but can be used by generalist or specialist. They are not appropriate for all wounds and need to be in the right microenvironment to survive. For further information see ESHT Guidelines for the use of Sterile Maggots in Wound Management – <a href="http://nww.esht.nhs.uk/wp-content/uploads/2018/08/01332">http://nww.esht.nhs.uk/wp-content/uploads/2018/08/01332</a> P.pdf

### Hydro surgical

Hydro surgical debridement involves the rapid removal of dead tissue using a high energy water beam. This water beam acts as a cutting agent and creates a vacuum to remove the dead tissue.

#### **Ultrasound**

There are 2 types contact and non-contact via an atomised solution, this method is selective and immediate. It can be delivered via a high frequency ultrasound which raises the temperature of the wound tissue. Low frequency creates micro-bubbles which loosen slough, biofilm and bacteria from the wound bed.

#### **Surgical and Conservative Sharp Debridement**

Surgical debridement is the excision of non-viable tissue usually carried out by a surgeon in theatre. It involves wide excision including healthy tissue until a bleeding wound bed is achieved. This is usually appropriate for large areas where rapid debridement is required i.e. necrotising fasciitis.

Conservative Sharp debridement (CSD) another method of debridement, using a scalpel, forceps and scissors and takes place at the bedside or clinic setting. It is recognised that nurses undertake CSD following adequate training and mentorship (Fairbairn, 2002; Gray et al 2011). The main risks to sharp debridement include damage to underlying structures, excising too much tissue, bleeding, infection, and pain (Strohal et al., 2013). CSD is regularly used in Podiatry to remove digits or bone from wounds.

#### 9. Wound Infection

There is no one test to definitively diagnose wound infection. Holistic clinical assessment of the wound and the patient can help to determine presence of infection. Swabbing a wound will help to determine sensitivities and resistances to systemic treatments. A swab should not be relied upon alone as swabs will not pick up bacteria if 'missed' when

swabbed or if protected by a biofilm, which it will also not detect. (Shultz 2011) (See 'How to take a wound swab' (Section 7).

Clinical judgement and holistic assessment are essential to interpret signs and symptoms.

The 'classic' signs of wound infection are:

- Inflammation
- Swelling
- Pyrexia
- Increased exudate
- Increased Pain
- Malodour

Additional indications of infection may include:

- Deterioration of the wound
- Discolouration of the wound bed
- Pocketing at the wound base
- Friable fragile granulation tissue that bleeds easily
- Loss of appetite
- · General lethargy, malaise
- Inability to undertake normal activities
- Deterioration in glycaemic control in patients with diabetes
- A delay in healing and wound progression
- Raised inflammatory markers in blood results (CRP)

There is an increased risk of infection if the patient is compromised by:

- Extremes of age
- Underlying disease processes e.g. malignancy, diabetes, or severe debilitating disease
- Prior drug therapy e.g. the use of immunosuppressive drugs, steroids, or the use of broad-spectrum antimicrobials

### Patients undergoing surgery

Infection is usually spread by the hands of staff, inanimate objects (e.g. instruments, clothes, and scissors) and dust particles or droplets.

Hand washing has been found to be the most important procedure for preventing infection. See Hand Hygiene Policy - <a href="http://nww.esht.nhs.uk/wp-content/uploads/2018/08/00434">http://nww.esht.nhs.uk/wp-content/uploads/2018/08/00434</a> P.pdf

# Dark skin tones and 'erythema'

Erythema is a change in colour of an area of skin, caused by increased blood flow. A common symptom to many diseases, particularly inflammatory skin diseases.

In dark, olive, brown skin tones this is not necessarily the case. And example is sunburn - a common misconception that people with dark skin tones do not burn in the sun. It does happen but may not be visible, we associate 'redness' with sunburn.

Erythema in dark skin can be easy to miss, there are ways of spotting It. Changes in skin colouration are often the main sign compared with unaffected areas.

Do not rely on 'redness' in dark skin tones to identify infection, use a holistic assessment and look for other signs and symptoms as set out in Section 9.

#### 9.1 Definitions of bacterial involvement within a wound

**Contamination:** Presence of bacteria with no multiplication **Colonisation:** Multiplication of bacteria with no host reaction

**Critical Colonisation:** multiplication of bacteria causing a delay in wound healing, usually associated with an exacerbation of pain not previously reported but still with no overt host reaction **Infection:** The presence of bacteria with an associated host reaction (Cutting et al 2005)

#### 9.2 Anti-microbial dressings

In wounds displaying signs of critical colonisation the treatment goal should be to decrease bacterial burden and disrupt any potential biofilm. This is most effectively achieved through debridement and ongoing cleansing to physically remove contaminants.

An appropriate antimicrobial dressing should also be used as this will protect the wound from the reformation of microbial bioburden and biofilm (Swanson et al 2015).

Regular re-assessment of antimicrobial use is essential to ensure patient focussed and cost-effective wound management (Wounds UK Best Practice Statement 2013).

ESHT wound care formularies for guidance on antimicrobial dressing selection can be found under Tissue Viability Resources on the extranet - http://nww.esht.nhs.uk/task/tissue-viability/

## 9.3 Antibiotics

Widespread use of antibiotics has made resistant organisms more prevalent. This means systemic antibiotics should be used with caution and only in appropriate circumstances. If

systemic or local infection has been identified or is suspected; then antibiotic formulary should be used to guide appropriate use.

Systemic antibiotics may be used in conjunction with antimicrobial dressings if antimicrobial action at a local (wound) level is deemed appropriate. (Swanson et al 2016).

#### 9.4 Biofilm

A biofilm is a group of living organisms that form a colony on the wound bed. They can contain a variety of species such as bacteria, fungi, yeast, algae, and other microbes. The formation of these biofilms leads to an ongoing inflammatory response and wound chronicity.

Current research suggests between 60-90% of chronic wounds contain a biofilm. This is contributing to understanding why chronic wounds are not healing.

The challenge for the clinician is to detect the subtle signs of change in the wound that suggest the presence of biofilm. The management of biofilm is becoming a priority in wound bed preparation due to the discovery of associated chronic inflammation and delayed healing (Schultz et al., 2018, Malone et al., 2017, Wolcott et al., 2009).

Debridement that disturbs biofilm provides a window of time for anti-microbial dressings to work and alters the wound bed making it difficult for new formation of biofilm (Wolcott et al 2009). It is easier to penetrate when the biofilm is less mature. Research also suggests that the most effective treatment of biofilm is removal or disruption to allow antimicrobial dressings to affect the bacterial burden within the wound to disrupt the inflammatory cycle in which the wound is stuck (Schultz et al 2015).

#### 10. Exudate

It is termed as a liquid produced by the body in response to tissue damage and present in wounds as they heal. Consisting of mainly water, but also containing electrolytes, proteins, nutrients, neutrophils, platelets, white blood cells, growth factors, inflammatory mediators, waste products, matrix metalloproteases (MMPs), and protein digesting enzymes (Wound Union of Wound Healing Societies WUWHS 2007).

Exudate supports healing and provides a moist wound environment. It facilitates diffusion of vital healing factors and migration of cells across the wound bed promoting cell proliferation. Exudate Provides nutrients for cell metabolism and aids autolysis of damaged or necrotic tissue.

Over or under production of exudate may adversely affect healing and any factor that increases capillary leakage or predisposes to the development of tissue oedema may boost exudate production. Low exudate may indicate a systemic problem.

# **Exudate Types:**

Term	Clinical Appearance	Reason
Serous	Clear watery consistency	Possibly a sign if infection if profuse.
		Some Bacteria produce fibrinolysis, which
		degrades fibrin clots or coagulated plasma
Fibrinous	Cloudy	Contains fibrin protein strands
Purulent	Producing or containing pus	Contains pyogenic organisms and other
	Creamy/grey/yellow	inflammatory organisms
Haemopurulent	Blood stained pus	Contains neutrophils, dead and dying
		bacteria and inflammatory cells.
		Infection may be present
		Consequent damage to dermal capillaries

		leads to bloody leakage
Haemorrhagic	Bloody	Capillaries are so friable they readily breakdown, and spontaneous bleeding occurs.  Not to be confused with bloody exudates from over enthusiastic debridement.

(Cutting 2004)

#### 10.1 Acute wounds

Exudate is released from the blood vessels as a response to the inflammation phase of wound healing this will wash over the wound with nutrients and assist with debridement and autolysis. Therefore, assists in repairing and healing the wound. During the acute wound stage exudate contains endogenous proteases that assist with cell growth and closure of the wound (Benbow and Stevens 2010).

#### 10.2 Chronic wounds

Wounds present for more than six weeks and are considered to be stuck in the inflammatory stage. There is an increase in exudate levels and destruction of the extracellular matrix (ECM) (Widegrow, 2012). Exudate differs from acute wound fluid and does not contain the active growth factor.

#### 10.3 Excess exudate

Hinders the progression of wound healing and will cause maceration to the peri wound making the wound edges widen. High exudate levels can have a psychological effect and diminished quality of life, which need to be addressed in the assessment process.

- The wound and the patient must be assessed to establish the underlying cause of exudate production they can include heart failure, lymphoedema, kidney disease, venous ulceration, obesity, malnutrition, surgical wounds, Infection, trauma, burns.
- Identify local, systemic, or psychosocial factors.
- Make referrals to the appropriate service if underlying causes are identified, i.e. heart failure team.
- Carry out appropriate assessments, blood tests, swabs, x-rays, MRI.

Exudate should be reviewed at each dressing change to determine if the dressing is still appropriate and to indicate if the wound is healing or deteriorating (Davies, 2012). This should be recorded in the assessments to include type, colour, and consistency. The volume of the exudate should be recorded.

## Volume of exudate and wound appearance

None	Wound tissue dry
Scant	Wound tissue moist
Small	Wound tissue wet
	Moisture evenly distributed in the wound
Moderate	Wound tissue saturated
	Drainage may or may not be evenly distributed in the wound
Copious	Wound tissue bathed in fluid
	Drainage freely expressed

(Bates-Jenson 1999)

### Management of exudate

Area	Management options
Cleansing of Peri-wound skin	Use tap water to remove excess exudate unless sterile sodium chloride 0.9% indicated (see wound cleansing section 4.4).
Protect the skin	Barrier product, cream or non-sting film is highly recommended
	Consider a topical steroid to reduce inflammation and excoriation
	Dressings may not always be the most appropriate option for exudate management (White & Cutting 2006) so consider:  Stoma/wound bags
	<ul><li>Limb elevation/gentle compression</li><li>Refer for specialist advice</li></ul>
Wound bed dressings	Dressings achieve wound exudate management by absorbing, gelling, and transferring the fluid away from the wound bed
	When choosing a dressing product it is important to be aware of the fluid handling properties

## 11. Care of surrounding skin

- Keeping the surrounding skin hydrated can prevent breakdown of skin integrity.
- Using emollients and soap substitutes to wash skin will help to soften and hydrate the skin.
- Emollients are moisturisers that soothe and hydrate the skin. They are indicated for all dry or scaling disorders, but their effects are often short lived so must be applied
- frequently and regularly to maintain improvement. They are best applied after shower or bath.
- Choice can include ointment, cream, or lotion depending on severity of dryness.
- Emollients should be applied in the direction of hair growth.
- Use a steroid cream if indicated.
- Discuss with GP and if continuous concerns refer to appropriate specialist e.g. dermatology.

#### 11.1 Peri wound skin

Unhealthy peri wound skin can be characterised as dry, macerated, or excoriated (Ousey et al., 2013). Incontinence causes maceration and excoriation of the skin and treatment for this would be different to that of pressure ulcers. This highlights importance to correctly identify the nature of the causative factor (Defloor and Schoonhoven, 2004).

Early identification of peri wound tissue damage is crucial to prevent the wound increasing in size and healing being compromised (Dowsett, 2009).

Assessing the Peri wound skin should include identifying if any of the following features are evident:

- maceration
- excoriation
- erythema
- loss of colour
- blistering
- spongy texture

- loss of skin integrity
- hyperkeratosis

## 11.2 Self-caring

NWCSP has developed guidance on patients/carers looking after the wounds. Supporting people with wounds to look after their own wound is likely to improve their self-confidence and quality of life. It is also a way to reduce pressure on the NHS and reduce the risk of infection.

NWCSP-Looking-after-your-wound-1.pdf (nationalwoundcarestrategy.net)

#### 12. Wound Odour

Wound odour also referred to as malodour is typically the result of necrotic tissue or bacterial colonization in the wound bed. Some dressings can also produce an odour as a result of the chemical reaction taking place between the dressing and the wound exudate, e.g. hydrocolloid dressings.

Most wound odours may arise from metabolic processes of anaerobic bacteria, however in chronic wounds the odour may be due to tissue degradation. Foul smelling compounds of cadaverine and putrescine are realised by anaerobic bacteria as part of the putrefaction of tissue (Holloway S. 2004).

Organisms isolated from malodourous wounds include anaerobic such as Bactericides and Clostridium species. Aerobic bacteria include Proteus, Klebsiella, and Pseudomonas. Recent research has indicated that wound odour produced by some bacteria is specific to that species and can be analysed electrochemically to identify the presence of organisms such as beta-haemolytic streptococci (Parry A.D, et al 1995).

An unpleasant odour can be due to factors that are due to the presence of necrotic tissue, microorganisms, high levels of exudate, poorly vascularised tissue, sinus wounds, enteric or urinary fistula, and fungating wounds (WUWHS, 2007; Gethin et al, 2004). Purulent exudate is suggestive of a wound infection (Nix, 2016). Management of malignant wounds can be a challenge. Assessment of odour can be varied and subjective but should be addressed. A presence or change of odour should trigger holistic assessment or re-assessment of a wound.

#### 12.1 Assessment of wound odour

Malodourous wounds can have a psychological effect on the patient, relatives, and carers. Therefore, these wounds should be assessed and a suitable dressing applied.

The Wound odour scoring tool (Haughton and Young 1995) can be used as a descriptive scale to assess wound odour:

- **Very strong:** Odour is evident on entering the room with the dressing intact.
- **Strong:** Odour is evident on entering the room with the dressing removed.
- **Moderate:** Evidence of odour at close proximity to the patient with dressing intact.
- Slight: Evidence of odour at close proximity when the dressing is removed.
- No odour: No odour present even with dressing removed.

#### 12.2 Treatment of wound odour

Treatment of malodourous wounds is aimed at addressing underlying infection or debridement of the devitalised tissue responsible for the odour (Thomas S, Fisher B, et al 1988).

- Treatments can include:
- Topical or systemic antibiotics.
- Metronidazole gel or powder can be effective against anaerobic bacteria.
- Debridement of devitalised wound tissue e.g. debridement products, maggot therapy.
- Odour controlling dressings can help mitigate the psychological effect. Activated charcoal as a deodorising agent in dressings.
- Some varieties of honey contain potent antimicrobial agents and sugar. The hyperosmotic environment produced by high concentration of sugar is believed to inhibit bacterial growth (Chirife J. 1983) therefore preventing odour formation.
- External deodorisers such as air fresheners, scented candles, essential oils, coffee grounds, can be used to mask the odour.

#### 13. Nutrition

Nutritional status plays a critical role in the wound healing process. There are multiple factors to consider when assessing including reduced access to food, poor appetite, dysphagia, malabsorption, and increased metabolism all of which can contribute to a deprivation of nutrients and delayed wound healing.

It is therefore important to screen, identify and treat for malnutrition following the MUST protocol in anyone at risk of pressure damage and wounds.

Considering all aspects of nutrition is important to optimise healing, therefore single vitamin or mineral supplements are not recommended in isolation.

Once the individuals MUST score is completed and calculated an appropriate care plan is implemented and referral to dietician if indicated.

Please consider referral to a dietician for any individual with a severe or slow-healing pressure ulcer or wound, even if they do not score highly upon screening.

For further information please see: ESHT Nutrition and Hydration Policy for Adults - http://nww.esht.nhs.uk/wp-content/uploads/2018/08/01354 P.pdf

And patient information sheet: Eat well, heal well: Wound healing and nutrition - <a href="https://www.esht.nhs.uk/wp-content/uploads/2018/02/0679.pdf">https://www.esht.nhs.uk/wp-content/uploads/2018/02/0679.pdf</a>

#### 14. Smoking

Nicotine inhibits epithelialisation, macrophage activity and wound contraction. It also impacts on circulation and tissue perfusion. Where appropriate, guidance can be given on Smoking Cessation.

## 15. Ageing

- General slowing of the metabolic process
- Reduced thickness and collagen synthesis
- Decline of immune system

# 16. Drug Therapies

Cytotoxic drugs interfere with cell proliferation and may cause neutropenia, making the
patient more susceptible to wound infection.

- Long-term use of corticosteroids may suppress fibroblast and collagen synthesis.
- Non-steroidal anti-inflammatory drugs (NSAIDs) suppress the normal inflammatory response and may affect healing by causing vasoconstriction.

#### 17. Pain

"Pain is whatever the experiencing person says it is, occurring whenever the experiencing person says it does" (McCaffrey 1968). Pain is a common symptom in patients with chronic wounds (Woo et al 2012a). In patients with Venous Leg Ulcers it has been reported as high as 74% with 56% describing the pain as moderate to severe (Edwards et al 2014). One study reported as many as 88% of people with pressure ulcers experienced pain at dressing change and 84% while at rest (Szor and Bourguignon 1999).

Pain is a stressor, triggering the stress response with an outpouring of the adrenal hormone's cortisol and corticosterol. These hormones impact by delaying the inflammatory response. It also may lead to reduction in the patient's quality of life, leading to reduced sleep, and reduced appetite, further aggravating the stress responses.

Wound-related pain is complex, involving a multitude of physiological and psychological factors, such as emotional state, culture, personality, meanings, and expectations (Woo, 2012a). Pain can be cyclical; it triggers stress and anxiety which can heighten the sensation of pain (Solowiej et al., 2009; Woo et al., 2012b). Pain and stress are intricately

linked in patients with chronic wounds. Unresolved pain predisposes individuals to stress and associated physiological responses that can impair wound healing.

Chronic pain from wounds is commonly both nociceptive and neuropathic (Dallam et al., 2016; Fear, 2010). Nociceptive pain can be somatic and visceral. Somatic derives from the skin, bone, muscle or connective tissue and is typically described as gnawing, aching, tender or throbbing and well localised. Visceral pain comes from internal organs. It is poorly localised and cramping in nature (Dallam et al., 2016).

Neuropathic pain arises from abnormal processing of the sensory input of the peripheral or central nervous system. Symptoms include sensations of burning, stabbing, stinging, shooting and like electric shocks. It can also include allodynia (pain from typically non-painful stimuli i.e. a light touch, bed clothes) and hyperalgesia (an exaggerated response to a stimulus that is normally painful). It is commonly seen with peripheral neuropathy, phantom limb, and spinal cord compression.

To avoid pain, people with chronic wounds often restrict mobility and social activities, thus leading to reduced functional ability and isolation (Green et al, 2014; Woo, 2012b). These changes; reduced mobility, ability to carry out ADL's and pain are linked to depression and overall reduced quality of life.

## Wound pain may be categorised as:

Background pain	Continuous or intermittent that is felt at rest
Incident pain	Pain that occurs during the day to day activities such as
	mobilising or coughing
Procedural pain	Pain that results from routine procedures such as dressing
·	changes or wound cleansing
Operative pain	Pain associated with significant wound interventions e.g.
	debridement or wound biopsy

### 17.1 Assessment of pain

Poor pain assessment often leads to poor pain management. The complexity of pain requires a comprehensive assessment that includes the type, location, quality, severity and timing of pain to enable introducing appropriate measures to alleviate pain. This forms a basis to evaluate effectiveness of these measures. Reassessment of pain and its management is paramount to optimise successful pain treatment. Tools to support assessment could include recording in a diary the frequency and pain experience. Pain management resources and Assessment tools used within ESHT are available via the Extranet at <a href="http://nww.esht.nhs.uk/?s=pain">http://nww.esht.nhs.uk/?s=pain</a>

### 17.2 Pain control in wound management

Patients may experience pain as result of:

- Products and techniques to cleanse wounds
- Trauma of the tissues and surrounding skin when dressing removed
- Skin excoriation
- Failure to record patients' earlier reports of pain and plan care
- Infection, which can exacerbate existing wound pain
- Poor techniques when using dressing and bandaging

#### Also:

- The type of wound i.e. depth
- · Location of the wound
- Patients perception and previous experiences
- The stage in the healing process and approaches to the wound management

Referral to specialist pain services may be necessary if pain is not managed effectively. They will also utilise alternative pain management methods. Effective management of pain not only requires the use of pharmacological agents, but also mindful attention to practical, personal and social factors that may account for the variability in pain experience.

#### 18. Psychological Factors

Low mood and depression are common in people with chronic wounds (Edwards et al 2014). Studies demonstrate occurrence of depression and/or anxiety between 26-48 % of patients with chronic wounds (Renner and Erfurt-Berge 2017). Depression is often associated with wound duration, uncontrolled exudate, odour, pain and immobility (Jones et al 2008, Renner and Erfurt-Berge 2017).

Negative body image can impact on the ability to self-care and social interaction due to concerns of unsightly dressings / bandages and having to wear clothing/footwear that would not be their choice (Issac and Watson 2016).

Depression/anxiety and Quality of life (QOL) can be measured using specific assessment tools. Examples used by healthcare professionals include SF - 36, HADS - Hospital Anxiety and Depression scale, GDS - Geriatric Depression scale, Patient Health Questionnaire 9 - item, Wound QOL. Depending on the result referral to GP or specialist services may be required.

#### 19. How to make a Specialist Tissue Viability Referral

# Before making a TVN referral -

Follow the Tissue Viability Referral Pathway flowchart to ensure you are referring to the correct service.

Then check you have completed a full holistic wound assessment, obtain medical photos prior to referral and discussed with your patient.

If not completed fully this will delay the TVN team's response and return of the referral for essential information

Tissue Viability Referral Pathway (esht.nhs.uk)

#### **Acute Referrals:**

Acute TVN referral form (Appendix C) can be found on e-searcher:

- Select your patient: X number or NHS number
- Enter 'Patient Documents'
- Electronic referral drop down box, select 'Generate Tissue Viability Referral form'
- Inpatient vascular nurse referrals form can also be found on e-searcher

Acute TVN enquires/contacts via e-mail <u>esht\_tr.tissueviability@nhs.net</u> with full details, completed wound assessment and photos if appropriate.

### **Community Referrals:**

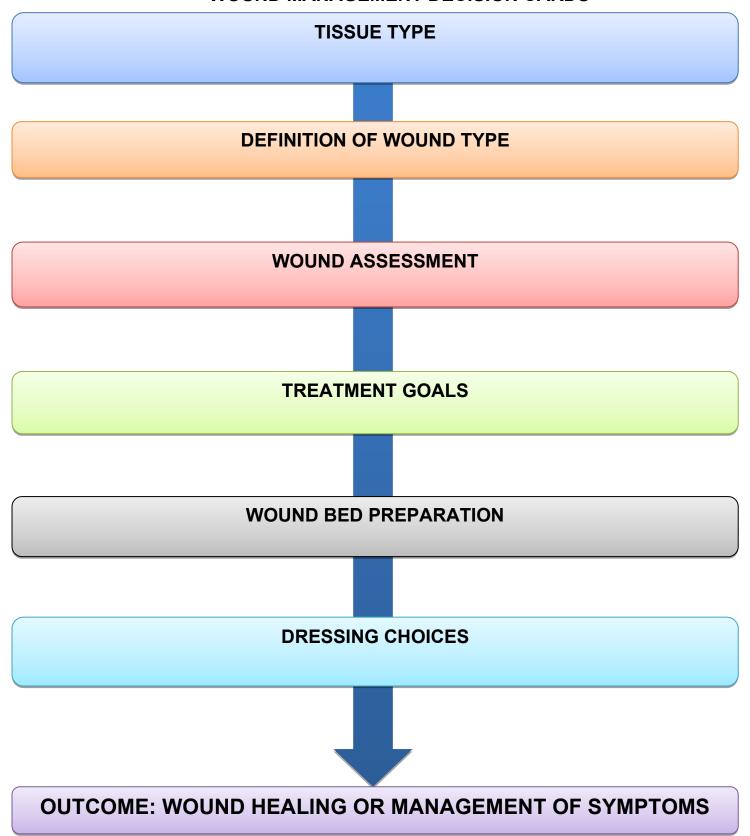
Community TVN referrals (<u>Appendix D</u>) for **Hastings & Rother CCG** should be completed and sent via e-mail to: <u>esh-tr.communitytissueviability@nhs.net</u>

Community TVN referrals (<u>Appendix D</u>) for **Eastbourne**, **Seaford & Hailsham CCG** should be completed and sent to Healogics via e-mail to: <u>EHSCCG.referralswhc@nhs.net</u>

Direct referrals to the vascular Team: <a href="mailto:esh-tr.vascularreferral@nhs.net">esh-tr.vascularreferral@nhs.net</a>

# 20. Wound types

# **WOUND MANAGEMENT DECISION CARDS**



# **Necrotic Tissue**



Also known as eschar. Dead tissue which may appear hard, dry and black. Dead connective tissue may appear grey. The presence of dead tissue in wounds delays healing. Necrotic tissue may soften by autolysis and bacterial liquefaction.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Set realistic and specific goals based on assessment
- Remove necrotic tissue to provide a clean wound base for granulating tissue
- Reduce bacterial load
- Prevent/remove Biofilm
- Manage Exudate/odour
- <u>Caution</u>: <u>Do Not</u> attempt to debride from heels or feet. Keep the area dry and refer to specialist. If patient is diabetic and/or PVD refer direct to Vascular Team and/or Diabetic Podiatry
- Clean wound bed and surrounding skin if any obvious debris
- Consider use of Antimicrobial wound irrigation solution if bacterial presence/infection/biofilm
- Peri wound management may be required Emollient for dry skin or barrier products for maceration
- Primary dressings Alginate, Honey, Hydrocolloid or Hydrogel
- Secondary dressing Absorbent padding, Foam

Refer to TVN if autolytic debridement unsuccessful, may consider maggot therapy or recommend sharp debridement

# Necrotic Heel/Foot







Also known as eschar. Dead tissue which may appear hard, dry and black. Dead connective tissue may appear grey. The presence of dead tissue in wounds delays healing, however in a heel maintain as a dry wound as necrotic tissue acts as the body's natural biological cover and should not be moved (EPUAP 2009)

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Set realistic and specific goals based on assessment
- Do not attempt to debride heels or feet.
- Keep the area dry and refer to specialist
- <u>Caution</u>: <u>Do Not</u> attempt to debride from heels or feet. Keep the area dry and refer to specialist. If patient is diabetic and/or PVD refer direct to Vascular Team and/or Diabetic Podiatry

# If required:

- Primary dressing Dry, non-adherent dressing
- Secondary gauze, absorbent pad, secure with light bandage

# Sloughy Tissue







Slough is formed by an accumulation of dead cells in the wound exudate. It is light yellow/cream in colour and must not be confused with infected tissue and pus.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Set realistic and specific goals based on assessment
- Remove Slough and provide a clean wound base for granulating tissue
- Manage exudate/odour
- Prevent/remove Biofilm
- Clean wound bed and surrounding skin if any obvious debris
- Consider use of Antimicrobial wound irrigation solution if bacterial presence/infection/biofilm
- Peri wound management may be required Emollient for dry skin or barrier products for maceration

Dressing choice will depend on size and/or location:

- Primary dressings: Hydrocolloid, Gelling Fibre, Alginate or Antimicrobial
- Secondary dressing: Hydrocolloid, Adhesive Foam or other absorbent dressing
- Extensive cavity wounds may require Negative Pressure Wound Therapy under Specialist advice

# **Granulating Tissue**







Healthy red tissue which occurs during the proliferative phase of healing. Fibroblasts migrate to the wound to produce collagen fibres. The tissue is well vascularised and bleeds easily.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- · Set realistic and specific goals based on assessment
- Provide a moist wound healing environment
- Prevent trauma to wound bed
  - Clean wound bed and surrounding skin if any obvious debris
- Consider use of Antimicrobial wound irrigation solution if bacterial presence/infection/biofilm
- Peri wound management may be required Emollient for dry skin or barrier products for maceration

Dressing choice will depend on size and/or location:

- Primary dressings: Hydrocolloid, Gelling Fibre, Alginate, Foam, low adherent
- Secondary dressing: Adhesive Foam or other absorbent dressing

# **Epithelializing Tissue**







Process by which the wound surface is covered by new epithelium, this begins when the wound has filled with granulation tissue. The tissue is pink, almost white, and only occurs on top of granulation tissue.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Set realistic and specific goals based on assessment
- Provide a moist wound healing environment
- Prevent trauma to wound bed and protect fragile epithelial cells

Dressing choice will depend on size and/or location:

• Hydrocolloid, foam, low adherent, barrier product

# Cavity wounds





A loss of continuity of the skin or mucous membrane with associated tissue loss (epidermal covering) which involves the dermal layer of the skin and may also expose underlying structures such as tendons, muscle and bone. Wound is deeper than 2cms.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Set realistic and specific goals based on assessment
- Remove Slough/necrotic tissue and provide a clean wound base for granulating tissue
- Manage exudate/odour
- Prevent/remove Biofilm
  - Clean wound bed and surrounding skin if any obvious debris
  - Consider use of Antimicrobial wound irrigation solution if bacterial presence/infection/biofilm
  - Peri wound management may be required Emollient for dry skin or barrier products for maceration

Dressing choice will depend on size and/or location and exudate volume:

- Primary dressings: Honey, Hydrocolloid, Gelling Fibre, Alginate or Antimicrobial
- Secondary dressing: Hydrocolloid, Adhesive Foam or other absorbent dressing
- Extensive cavity wounds may require Negative Pressure Wound Therapy under Specialist advice
- Refer to Specialist Practitioner or Surgeons if Sharp Debridement or Surgical Debridement required

# Sinus Wounds







A sinus is a track to the body surface from an abscess or from material which is an irritant and becomes a focus for infection. Sinuses can become chronic if the causative factor is not resolved.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Set realistic and specific goals based on assessment
- Allow drainage of exudate
- Protect surrounding skin
- Promote granulation from the base of the wound
- Surgical intervention for incision and exploration may be required to explore the source of infection
- Irrigate sinus to remove debris
- Peri wound management may be required, i.e. barrier products to prevent maceration

Dressing choice will depend on size of opening:

- Wide opening: consider use of Gelling fibre or alginate dressing as per cavity wounds, secondary absorbent dressing to manage exudate
- Narrow opening: Use absorbent dressing to manage exudate, or consider wound manager/stoma systems depending on volume of exudate

# Colonised/Infected Tissue







See wound infection continuum card to support decision about classification.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Observe for local and systemic signs of infection
- Wound swab if host reaction or non-healing
- Refer to GP/Medical team if indicated
- Manage colonisation and treat infection
- Manage exudate/odour
- Prevent/remove Biofilm
- Clean wound bed and surrounding skin if any obvious debris
- Consider use of Antimicrobial wound irrigation solution for bacterial presence/infection/biofilm
- · Consider use of debridement cloth or pad
- Peri wound management may be required Emollient for dry skin or barrier products for maceration
- Consider antimicrobial primary dressing in addition to secondary dressings based on wound type. I.e.: Silver dressings, honey, flaminal

# **Burns and Scalds**







# First Aid:

- Remove source of heat if able. Cool area with cool or lukewarm water for 20 mins
- If limited water supply, apply a cold water compress and change frequently over 20 minutes
- Do not use ice or ice packs

Burns referrals to Queen Victoria Hospital, East Grinstead Send Referrals and medical illustrations via: <a href="https://www.trips.nhs.uk">www.trips.nhs.uk</a>

- All children who present with burns must be referred to Queen Victoria Hospital, East Grinstead
- Only a skilled practitioner in burns management should de-roof blisters
- Wound care information for initial management of burn wounds is available at: www.lsebn.nhs.uk

# Over/Hyper Granulation Tissue





Over production of granulation tissue which is in excess of that required to fill the wounds. Can be raised above the surface of the wound and surrounding tissue.

- Initial wound assessment
- Wound Care plan or template
- · Review at each dressing change and update associated documentation
- · Set realistic and specific goals based on assessment
- Reduce bacterial load
- Prevent/remove Biofilm
- Reduce over granulation and promote epithelialisation
- If the wound appears colonised or infected see wound infection continuum and decision card for infected wounds
- Clean wound bed and surrounding skin if any obvious debris
- Clean with Antimicrobial wound irrigation solution
- Consider use of debridement cloth or pad
  - Primary dressings: Foam, Antimicrobial
  - Consider steroid treatments if unsuccessful antimicrobial treatment
  - Refer to dermatology if no progress following above treatments

# Blisters





Pocket of fluid within the upper layers of the skin. Typically caused by friction, burning, freezing, chemical exposure, cellulitis. Most blisters are filled with serous fluid or can be filled with blood or pus.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- · Set realistic and specific goals based on assessment
- Some blisters will require specialist assessment, i.e. Burns Unit, Dermatology e.g. Bullous Pemphigoid
- Protect and prevent infection
- Do Not attempt to De-roof blisters
- Do not aspirate or de-roof intact blisters
- Large/Tense blisters can be aspirated if necessary if causing loss of function i.e. foot blisters, preventing walking, pain, or very large blisters – Seek specialist advice

# **Dressing choice dependent on blister type:**

- Broken
  - Primary dressing: Lay skin flat, silicone/low adherent dressing, leave undisturbed for up to 7 days
  - Secondary dressing: absorbent pad and bandaging
- Soft
  - Primary dressing: Can be left exposed, or low adherent dressing
  - Secondary dressing: absorbent pad and bandaging
- Large/Tense
  - Primary dressing: Lay skin flat, silicone/low adherent dressing, leave undisturbed for up to 7 days
  - Secondary dressing: Super absorbent pad and bandaging
  - Refer to specialist as may require controlled rupturing

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# Skin Tears



Traumatic injury due to shearing and tearing forces, or blunt trauma causing the epidermis to detach from the dermis, or both epidermis and dermis to separate from underlying structures.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- · Set realistic and specific goals based on assessment
- Define skin tear in line with ESHT skin tear protocol (see link below or via Extranet under Tissue Viability Resources)
- Prevent infection and further tissue damage
- Straighten/lay skin flap back over laceration if possible
- If there is a large surface area or deep tissue exposed, or significant haematoma, refer to Surgeon/Doctor/TVN
- Refer to ESHT skin tear protocol <a href="http://nww.esht.nhs.uk/wp-content/uploads/2019/05/Skin-tear-protocol.pdf">http://nww.esht.nhs.uk/wp-content/uploads/2019/05/Skin-tear-protocol.pdf</a>

# Cellulitis







Cellulitis is an acute spreading inflammation of the skin and subcutaneous tissue characterised by pain, warmth, swelling and erythema. Systemic symptoms can include: generally feeling unwell, fever, flu-like symptoms, and headache. It can be caused by microorganisms (usually bacteria) and often occurs where the skin has previously been broken: cracks in the skin, cuts, blisters, burns, insect bites, surgical wounds, intravenous drug injection and intravenous catheter insertion sites.

- In the Community If Cellulitis is suspected complete patient assessment in line with <u>East Sussex Community Cellulitis Pathway</u>
- Refer to GP/Medical team
- Initial wound assessment in cellulitis with tissue breakdown/ulceration
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Set realistic and specific goals based on assessment
- Avoid compression garments during the Acute Phase
- High leg elevation to reduce oedema and pain
- Consideration of compression hosiery for recurrent cellulitis
- In complicated cellulitis (with ulceration) follow treatment goals based on tissue type
- Consider primary dressing choices based on tissue type
- Secondary dressings may need to include superabsorbent pads and bandaging to manage high volumes of serous fluid/exudate

# **Fungating Wounds**





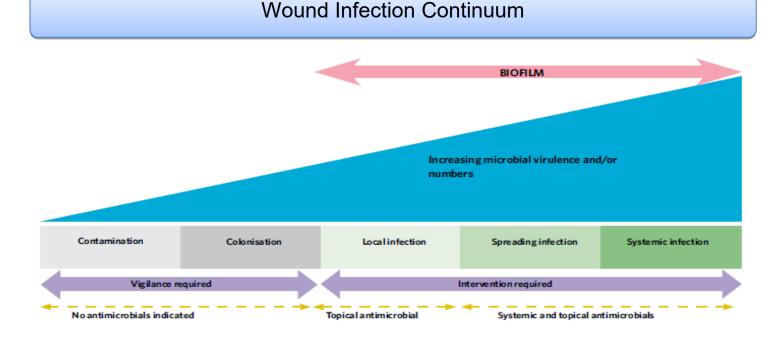


A lesion which infiltrates the epithelium, supporting lymph and blood vessels. As the tumour extends capillaries rupture, leading to tissue breakdown and necrosis. There is often a foul smell as a result of colonization by anaerobic organisms.

- Initial wound assessment
- Wound Care plan or template
- Review at each dressing change and update associated documentation
- Set realistic and patient specific goals

Treatment goals may include: • Control of odour • Control of exudate

- Minimise/Treat localised infection
   Manage pain
   Manage bleeding
   Being cosmetically acceptable for the patient
   Minimise dressing change
  - Normal saline may need to be used to remove dressings to minimise trauma.
     Consider use of medical adhesive remover to remove dressings to minimise bleeding
  - Clean wound bed and surrounding skin if any obvious debris
  - Consider use of Antimicrobial wound irrigation solution if bacterial presence/infection/biofilm
  - Peri wound management may be required Emollient for dry skin or barrier products for maceration
  - Dressing choice will be dependent on tissue type, exudate, malodour, infection, bleeding, pain, patient preference
  - Do not attempt to actively debride Seek TVN or relevant specialist advice
  - The primary goal of wound management may be palliation, not healing



Wound infection continuum is a simple sliding scale to aid clinical decision-making regarding the level of bacterial colonisation of a wound. A patient may never move to the furthest point on the right (colonised) on the continuum during their treatment. However, lower bacterial levels found in the colonised wounds generally lead to better healing. The status of a wound, which has *Spreading Infection*, *localised infection* or is *critically colonised*, should be considered when developing a treatment plan

### Using the wound infection continuum

- Spreading infection can be life threatening. Local signs associated with a spreading soft tissue infection; spreading redness (>2cms around wound margins), very high exudate levels, pain, malodour, heat in surrounding tissues and blistering
- Local infected is characterised by <2cms of redness around wound margins, symptoms similar to above but to a lesser degree
- Critically colonised delayed healing, malodour & raised exudate (slough may be also present)
- Contaminated/colonised is the normal healing state of a wound. A reduction in wound size over 2/52 period wound suggest an acceptable level of colonisation

<u>Consideration</u>: Review by doctor – treat host response systemically if indicated as per ESHT antibiotic policy

# **Dressing Selection\***

WOUND CLEANSING/IRRIGATION Sodium Chloride	BARRIER PRODUCTS Derma S
Prontosan Wound Irrigation Solution	Sorbaderm
Octenillin	Proshield Skin Protectant
Gotoriiiii	Medihoney Barrier Cream
	meanierie, Barrier Gream
ADHERENT FOAMS	NON-ADHERENT DRESSINGS
Mepilex Border Lite	Atrauman
Mepilex Transfer	Mepitel One
Biatain Silicone	NA Ultra
WADDING/BANDAGES	HYDROCOLLOID
Cellona K-Band	Duoderm
Flexiban Setocrepe	
Soffban	
INCORPORTED	41.0014
HYDROFIBRE	ALGINATE
Aquacel Extra	Biatain Alginate Ribbon
Kerracel	Flaminal Forte/hydro
ANTIMICROBIALS	SUPER ABSORBENT
Activon/Algivon Aquacel Ag Extra	DRESSINGS
Atrauman Ag Prontosan Gel	Kerramax Care
Flaminal Forte/Hydro	Zetuvit Plus
Iodoflex	Mextra Absorbent
	Flivasorb
ODOUR CONTROL	DEBRIDEMENT PRODUCTS
Carboflex	Debrisoft
Clinisorb	UCS

<sup>\*</sup>This is not an exhaustive list only an example of dressings that could be used

#### 21. Dressings

Wound management products are medical devices and include topical agents. Topical agents are applied directly to the wound whereas a dressing covers the wound, intending to promote healing and provide protection from further harm.

#### Two types of dressing:

Primary – used in direct contact with damaged tissue Secondary – superimposed over the primary dressings

The dressing selection should be made following a wound assessment and depend on the stage of healing and the aim of treatment. Patient preference also needs to be considered. As wounds heal different types of dressing may be required, so an inspection of the wound is required prior to application of the dressing.

Dressing selection of the most appropriate dressing material from a wide range is an essential step towards healing:

#### Key factors to consider in dressing selection:

- Type of wound i.e. Acute or chronic
- Wound depth and tissue involved
- Size and shape of the wound
- Amount and nature of the exudate
- Position, whether the location will make it difficult for the dressing to remain in place
- Appearance and stage of wound healing e.g. necrotic, sloughy, infected
- Pain and discomfort
- Care of the skin, including allergies and sensitivities
- Presence of infection
- Patient preference

#### As the wound heals different types of dressing may be required:

#### Ideal wound dressing (turner 1982)

- To maintain high humidity at the wound interface
- To remove excess exudate
- To allow gaseous exchange
- To provide thermal insulation
- To be impermeable to bacteria
- To be free of particle's and toxic wound contaminants
- To allow removal without causing trauma to the wound

ESHT Wound care formularies available on the Extranet for guidance on dressing selection based on tissue type at: <a href="http://nww.esht.nhs.uk/task/tissue-viability/">http://nww.esht.nhs.uk/task/tissue-viability/</a>

Refer to dressing manufacturer instructions for specific guidance on use of dressings.

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#### 23. Glossary of terms

- Abrasion produced by a rough surface striking the body
- Abscess a collection of purulent material
- Aerobes organisms requiring oxygen for survival
- Aetiology cause
- Amputation resection of a terminal part of a limb
- Angiogenesis this occurs during the proliferative phase of healing when new blood vessels infiltrate the wound and endothelial budding forms capillaries
- Antibiotics a chemical substance produced by a micro-organism which has the capacity to dilute solutions, to inhibit selectively the growth (static) of micro-organisms or to kill them
- Asepsis without pathogens, infection or toxins
- Aseptic technique absence if micro-organisms in the surgical environment to reduce the risk of infection
- Autolysis natural, spontaneous process of devitalised tissue being separated from viable tissue. together with proteolytic enzymes, macrophages activity is thought to be responsible for autolysis
- Bio surgery Removal of slough or debridement of necrotic tissue by maggots therapy
- Bulla/bullae another name for blisters. Circumscribed, elevated, palpable mass > 0.5cm, containing serous fluid
- Callus a build-up of keratinised skin. This is a reaction to persistent pressure
- Cellulitis A spreading non-suppurative infection of the soft tissue. inflammation and infection of the skin and subcutaneous tissue most commonly due to a streptococci or staphylococci
- Chronic wound a wound that has failed to proceed through an orderly and timely reparative process to produce anatomic and functional integrity
- Clean technique modified aseptic technique performed by one person where sterile gloves are not required, and potable tap water or shower can be used for cleansing
- Co morbidity The presence of co-existing or additional disease
- Contamination presence of micro-organisms but without multiplication
- Contraction a function of the healing process in granulating wounds whereby the edges of the wound are drawn towards each other healing by secondary intention
- Critical colonisation delayed healing with malodour, raised levels of exudate and slough present in the wound clinical infection and surrounding cellulitis
- Debridement the removal of devitalised or contaminated tissue
- Deep infection Evidence of abscess, septic arthritis, osteomyelitis or septic tenosynovitis
- Dehiscence the breaking down of surgically closed wound
- Demarcation when devitalised tissue begins to separate from the viable wound tissue and the wound bed becomes apparent
- Dermatitis Inflammation of the skin, either by direct contact with an irritating substance or an allergic reaction
- Diabetic foot infection, ulceration and/or destruction of deep tissue associated with neurological abnormalities and various degrees of peripheral vascular disease in the lower limb in a a person with diabetes
- Epithelium or epithelial tissue the tissue that migrates across the wound in the final stages of wound healing. these epidermal cells are pink/white in colour at the wound edges or island over granulation tissue
- Erythema a redness of the skin caused by congestion of capillaries due to injury, infection, inflammation or hyperaemia
- Eschar hard necrotic tissue that often appears black and leathery
- Excoriation stripping of the skin
- Exudate liquid produced by the body in response to tissue damage
- Fissures cracks, splits and small cuts

- Fistula an abnormal passage that has formed between two organs i.e. Bowel and skin. Fistulas may be congenital or caused by injury, infection or the spread of malignant disease
- Formulary a wound dressing formulary consists of an agreed, regularly reviewed limited list of dressing by a group of practitioners
- Friable easily damaged, a wound that bleeds easily when touched
- Gangrene death of tissue generally associated with loss of vascular supply and followed by bacterial infection and putrefaction
- Granulation During the proliferative phase of healing, this is the bright red tissue from new capillary loops which is red/deep pink and moist
- Haematoma a bruise or collection of blood in the tissues
- Haemostasis the arrest of bleeding either by the physiological properties of vasoconstriction, coagulation or by surgical means
- Hallux Valgus deformity of the big toes
- Hydrophobic water repellent
- Hydrophilic can readily absorb water
- Hyperaemia the presence of excess blood in the vessels supplying part of the body
- Hyperkeratosis thickening of the epidermis
- Hyper granulation over granulation excessive laying down of the new blood vessels
  creating a bulge of highly vascular tissue which bleeds easily, the tissue forms beyond the
  level of the surface of the wound and prevents epithelisation from occurring
- Hypertrophic scar Develops soon after injury as a result of a wounding from example vaccination, acne or surgery. More common in large scars a such as burns and unlike keloid these scars do not invade the skin beyond the margins
- Induration hard (indurated) pigmented skin (lipodermatosclerois) may be suggestive of venous disease
- Infection condition in which the host interacts physiologically and immunologically with the micro-organism. Clinical evidence of redness, heat and pain are prominent
- Inflammation Defensive relation to tissue injury involves increased blood flow and capillary permeability and facilitates physiologic clean-up of the wound
- Intertriginous an area where opposing skin surfaces are in prolonged contact such as groins or axilla, friction and moisture entrapment are common complications
- Intertrigo a mild inflammatory process that occurs on apposing skin surfaces because of friction/moisture, characterised by erythema, superficial linear erosions at base of skin folds
- Ischaemia deficiency of blood caused by the functional constriction or obstruction of a blood vessel
- Keloid a thick protuberance of scar tissue, this out-growth of excessive collagen continues to grow for a considerable time, in some cases years and invade the healthy peri-wound skin
- Laceration produced when a blunt object strikes the skin with sufficient force to stretch and tear it. A crushing injury ensues, and the margins of the wound may be ragged, abraded and bruised
- Lesion a broad term referring to abnormalities in tissues, may be visible as tissue injury, sores or ulcers
- Maceration A softening or sogginess of the tissue owning to retention of excessive moisture.
   Usually present as moist red/white and wrinkled
- Macrophages blood cells which destroy bacteria and devitalised tissue and produce a variety of growth factors
- Necrosis the local death of tissue. the tissue is often black/brown in colour and leathery in texture.
- Neuropathy nerve damage leading to numbness and/or pain
- Osteomyelitis inflammation of bone and marrow usually caused by pathogens that enter the bone during an injury or surgery
- Over granulation see hyper granulation
- Pathogen any disease-producing agent or micro-organism

- Pemphigus a group of serious diseases of the skin characterises by the appearance of bullae
  of various sizes on apparently normal skin and mucous membrane. It is thought to be an
  autoimmune disease and occurs in men and women in middle and later adulthood
- Perfusion blood flow to the skin
- Periwound the area immediately around the wound
- Phlebitis inflammation of a vein
- Pressure ulcer area of localised injury to skin or underlying tissue due to pressure and shear
- Pus thick fluid indicative of infection containing leukocytes, bacteria and cellular debris
- Shear trauma caused by tissue layers sliding against each other, results in disruption or angulation of blood vessels
- Sinus course or pathway that can extend in any direction from the wound surface, results in dead space with potential for abscess formation
- Slough the term used to describe the thick yellow layer which often covers the wound and is strongly adherent to it. Its presence can be related to the end of the inflammatory stage of healing when dead cells have accumulated in the exudate
- Stasis stagnation of blood caused by venous congestion
- Thrombosis intravascular formation of a blood clot (thrombus)
- Undermining tissue destruction to underlying intact skin along wound margins
- Unstageable pressure ulcer covered in eschar or slough which prohibits complete assessment of the wound bed
- Vasculitis inflammation of the small arteries or veins with resulting fibrosis and thrombi formation. It is usually associated with rheumatoid disease
- Venous pertaining to the veins
- Venous Insufficiency Deep or superficial veins become incompetent permitting reverse flow and resulting in raised pressure in the superficial veins during ambulation
- Wound a cut or break in the continuity of the skin caused by injury or operation
- Wound bed preparation (WBP) is the global management of the wound to accelerate endogenous healing or to facilitate the effectiveness of other therapeutic measures

#### 24. Competencies and Training Requirements

There is an expectation that this wound care policy is used along with the clinician's clinical judgement and knowledge when applying the general principles and recommendations in this document. Recommendations may not be appropriate in all circumstances and must take into account the individual patients and available resources.

There is a range of wound healing and related study days available via ESHT Learning and Development. These courses are led by the ESHT tissue viability team and supported by wound care industry representatives. There are also are variety of tissue viability modules accessible via MYLearn

## 25. Document Monitoring Table

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Training	Tissue Viability Team	ESR (Electronic staff records)	As required	Pressure Ulcer Steering Group	Pressure Ulcer Steering Group	Pressure Ulcer Steering Group
Monitoring Arrangements	Tissue Viability Team	Tracking Referrals	Annually	Tissue Viability Team	Pressure Ulcer Steering Group	Pressure Ulcer Steering Group

#### Appendix A

## Due Regard, Equality & Human Rights Analysis

#### Title of document:

**Policy for Wound Management and Decision Cards** 

Who will be affected by this work? E.g. staff, patients, service users, partner organisations etc.

ESHT staff, patients, partner organisations, commissioning groups

### Please include a brief summary of intended outcome:

The guidelines have been developed by the East Sussex Healthcare Trust (ESHT) Tissue Viability team to support all clinicians in the clinical decision-making process in their wound care practice, reflecting current research and evidence based expert opinion.

		Yes/No	Comments, Evidence & Link to main content
1.	<b>Does the work affect one group less or mo of:</b> (Ensure you comment on any affected page/paragraph number)		
	Age	No	
	<ul> <li>Disability (including carers)</li> </ul>	No	
	• Race	No	Update of section 9 to incorporate new wound uk best practice statement which refers to 'addressing-skintone-bias in wound care. Improvement in awareness of 'skin tone'.
	Religion & Belief	No	
	Gender	No	
	<ul> <li>Sexual Orientation (LGBT)</li> </ul>	No	
	<ul> <li>Pregnancy &amp; Maternity</li> </ul>	No	
	Marriage & Civil Partnership	No	
	Gender Reassignment	No	
	Other Identified Groups	No	
2.	Is there any evidence that some groups are affected differently and what is/are the evidence source(s)?	No	Early identification in wounds of infection for patients with dark skin tones. Resource documentation available and included in this policy 'best practice statement which refers to 'addressing-skintone-bias in wound care.
3.	What are the impacts and alternatives of implementing / not implementing the work / policy?	outcomes	/ less favourable /delay in wound healing or ent if policy not implemented
4.	Please evidence how this work / policy seeks to "eliminate unlawful	Relevant	for all patients with a wound age of 18 years. ESHT TVN

	discrimination, harassment and	service not commissioned for children
	victimisation" as per the Equality Act 2010?	
5.	Please evidence how this work / policy seeks to "advance equality of	Applies to all characteristics
	opportunity between people sharing a	
	protected characteristic and those who	
-	do not" as per the Equality Act 2010?	The policy provides a consistant
6.	Please evidence how this work / policy	The policy provides a consistent
	will "Foster good relations between people sharing a protected	approach for wound care
	people sharing a protected characteristic and those who do not" as	
	per the Equality Act 2010?	
	Has the policy/guidance been assessed	Applies to all characteristics
7.	in terms of Human Rights to ensure	
	service users, carers and staff are	
	treated in line with the FREDA principles	
	(fairness, respect, equality, dignity and autonomy)	
	Please evidence how have you engaged	The policy is updated with the current
8.	stakeholders with an interest in	national wound care strategy programme,
	protected characteristics in gathering	5.1 with the authors stakeholders in the
	evidence or testing the evidence	work streams
	available?	
9.	Have you have identified any negative	no
	impacts or inequalities on any protected	
	characteristic and others? (Please	
	attach evidence and plan of action	
	ensure this negative impact / inequality	
	is being monitored and addressed).	

## Appendix B – Acute Wound Care Assessment

## WOUND ASSESSMENT AND EVALUATION FORM

Patient's name: X-Number: DOB:	Nurse://
y granufating opitholialising	TYPE OF WOUND  Pressure ulcer¹ Leg ulcer Diabetic foot ulcer Traumatic wound Skin tear/ laceration Surgical wound Other:
otic storing	□ Swab taken ( / /)  Result:
Front Bac	Photographs taken ( / /)
RELEVANT HISTORY   Immobility	☐ Medication (e.g. steroids):
□ Diabetes	incurcation (c.g. steroids).
□ Poor nutritional status	☐ Circulatory disorders
□ Dehydration	□ Respiratory disorders
□ Incontinence	☐ Immune deficiency
□ Heart/ Vascular disease	□ Allergies:
	Other
□ Mixed □ Other:	DATIX TO BE COMPLETED FOR PRESSURE  JLCERS (AS PER POLICY)  DATIX NUMBER:

(Patient label if available)
Patient's name: X-Number:
DOB:



WOUND EVALUATION
(Please enter
amount or tick as
appropriate)

	Start			
Length x Width (cm)				
Depth (cm)				
Undermining (if yes cm)				
Wound Bed		1	1	
~ Black – Necrotic (%)				
~ Yellow – Slough (%)				
~ Red – Granulation (%)				
~ Pink – Epithelial (%)				
Surrounding Skin				
Oedema				
Erythema (cm)				
Macerated				
Dry				
Fragile				
Healthy/ Intact				
Exudate*		1	1	
High				
Moderate				
Low				
Odour (Y/N)				
<b>Pain</b> (0 – 3)				
Signature and Role				

(Patient label if available)	
Patient's name: X-Number: DOB:	



CARE PLAN			
Treatment Objectives	□ Debridement of slough		Wound pain control
	☐ Management of exudate		Promotion of granulation
	□ Odour control		Protection of surrounding skin
DEBRIDEMENT OF NECROT	TIC TISSUE ONLY AFTER TISS	SUE VIABILITY OR VASCULAR ASS	ESSMENT (For Inpatients)
	Start: / /	Date and write changes made from	the original plan (in the appropriate box)
Cleansing solution			
Primary dressing			
Secondary dressing			
Moisturiser			
Referrals done (to whom			

(Patient label if available)

	Patient's name: X-Number: DOB:	
do sv	cumented elsewhere in this care pla	anything you think might be important and that is not in (for example, conversations with the patient and relatives, be given by TVN's or Vascular Specialist Nurses over the
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Appendix C – Acute Tissue Vi	iability Referral Form			
Acute Tissue Viability Referra	<u>al Form – </u> ALL Referrals <u>MU</u>	JST have an up to date wound care chart		
Patients Name				
Patients NHS/Unit no				
Referrers name with contact	no			
If Diabetic foot / arterial insuff	ficiency_refer direct to vasc	cular services (do not complete this form)		
Wound type (*)				
Pressure Ulcer Review	Moisture Lesion			
Cellulitis *	Leg Ulcer *			
Surgical Wound	Orthopaedic review			
Skin laceration/tear	NPWT review			
Burn	Fungating wound			
Other				
* Cellulitis – <u>REMEMBER</u> Str	ict High Elevation, simple p	protective dressings, skin care with antibiotics		
* Leg ulcer if chronic obtain information from community/practice nurse team/ask patient. Remove any compression bandaging on admission with the assessment. Does the patient have palpable foot pulses?				
Have you reviewed the wound Y/N If NO please review wound prior to referral				
Has the medical team review	ed the wound Y/N			
Current concerns regarding the wound with current wound treatment plan				
Wound swab taken date result on treatment				
Photos available Y/N				

## Appendix D – Community Tissue Viability Referral Form

## EHS, H&R, HWLH CCG WOUND CARE REFERRAL FORM

Practice:	Referred by:		
GP:	Referrer Cont	act Number:	
Patient Name: Referrer Emai		il:	
Patient Address:	Consent for referral including transfer of personal data and medical photography? Yes \Boxedow No \Boxedow Does the person have capacity to give consent? If not, has this referral been completed in the person's best interest?  Yes \Boxedow No \Boxedow		
Patient DOB:	Referral Date:		
Patient NHS No:	Patient Ethnic	: Origin:	
Patient Phone No:		eferral: Low Medium High	
	WOUND DETA		
Type of wound:		Date of Onset:	
Location of wound:		BMI:	
PRESSURE ULCERS:		DIABETIC FOOT ULCER	
Pressure ulcer grade: 1			
Nutrition: MUST score: Diet : Adequate I Inadequate Supplements : Yes No I			
Photograph attached /sent: Yes No Doppler results: N/A Date: (referrals will not be processed without images)  Left ABPI= Right ABPI=			
Healing Status: Wound healing ☐Deteriorating ☐Static > 6wks ☐Static > 12 wks ☐			
Exudate: None Minimal Mo	derate  H	igh Colour:	

Current Wound Treatment :			
Wound Infection: Yes No If y	/es state infection present (if known):		
	ntibiotics commenced /requested: Yes No D		
Other symptoms: Cellulitis increas Other: (state)	ed exudate Pain Malodour Pyrexia		
Wound bed Condition: (show %)	Wound Dimensions (cms)		
Healthy granulation(red)Necrosis (b	Max length: Max width: Max depth:		
Hypergranulation(raised) Slough(yellow)			
Other:(state)			
Pain: Yes No Score 0-10	Peri wound/skin:(Tick all that apply):  Healthy		
Score:	Haematoma  oedema  excoriation		
Analgesia: (type)	Moist/maceration Dry/flaky		
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	dermatitis/eczema Other (state)		
Med	ical History (tick all that apply)		
Diabetes Peripheral arterial disease Rheumatoid arthritis Malignancy/end of life			
State other medical History :			
Medications (tick all that apply)  Steroids Warfarin Insulin NSAID,s Diuretics Tramadol			
Anti hypertensives Please list all oth			
	For Office Use Only		
Date received:	Date triaged:		
Triaged by:	Signature:		
Outcome:			
Domicillary Visit: Clinic appointment: Remote Care plan: Date sent:			
Appointment Date: Assessment Time: Assessing Clinician :			
Appointment confirmed with:			
Comments:			
Signature: Name:	Date: Time:		

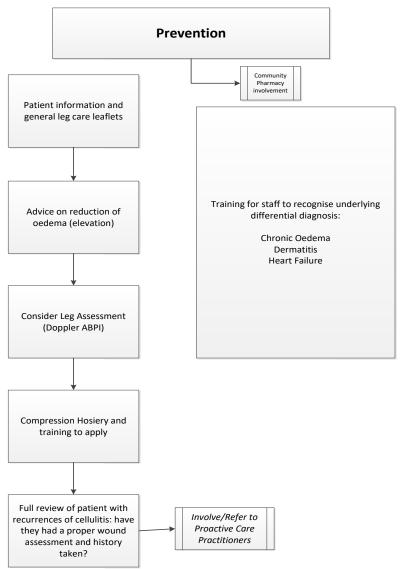
For EHS CCG send referral & photograph via nhs mail to: <u>EHSCCG.referralswhc@nhs.net</u> Or for enquiries call Healogics Wound Healing Centre: 01323 735588

For H&R CCG send referral & photograph via nhs mail to: esh-tr.communitytissueviability@nhs.net or for enquiries call 01323 493144

For Vascular Nurse referrals: esh-tr.vascularreferrals@nhs.net

#### **Appendix E – Community Cellulitis Pathway**

#### Community Cellulitis Pathway - page 1



#### Identification of high risk patients

#### **Diseases:**

Patients on Disease registers; Cardiology Diabetes Renal **Prostatic and Ovarian Cancers** Open Wound on Feet and Legs Fungal Toe Infections Venous and Arterial Disease Skin Anomalies Neurological Arthritis

#### **Mobility Issues**

**Immobile Patients** Poor Dexterity leading to poor foot hygiene

#### **Social**

People Sleeping in Chairs Pets

#### Medication

Immunosuppressant Therapy Drug regime i.e. steroids

#### Past History

Previous history of Cellulitis

#### **Environmental**

Poor hygiene Hoarding

Types of heating: electric/open fires - extreme heat

Using Risk Stratification Tool to Identify by Key professionals of at Risk Patients: Oedema Patients

#### **MDT Meetings**

Discuss and Identify Acute Patients by:

ACNP

DN

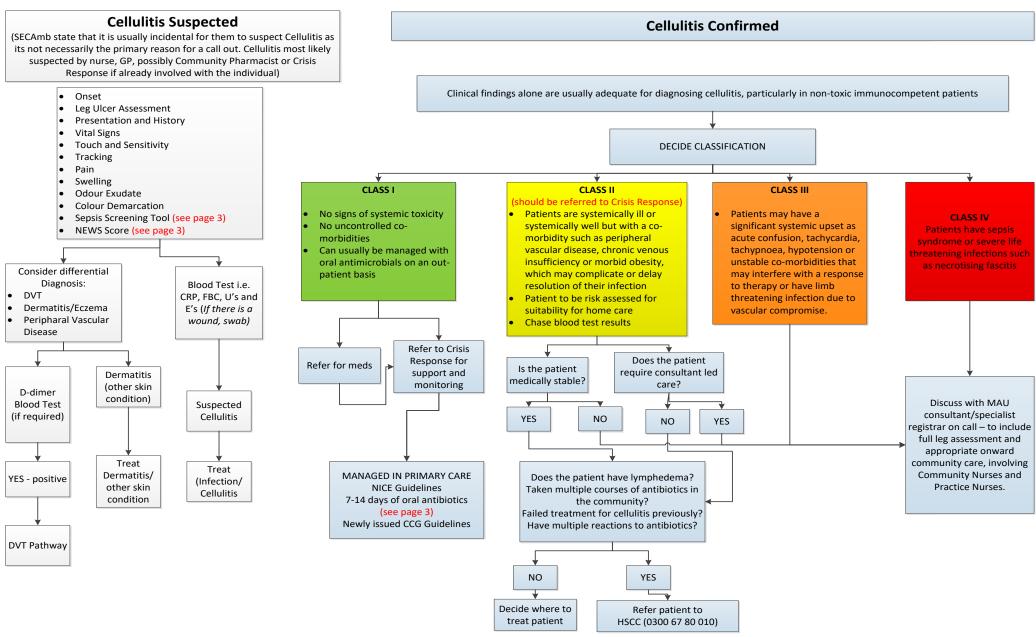
GP

ASC Mental Health

Podiatry if Required

Go to Page 2 if **Cellulitis is** suspected

#### **Community Cellulitis Pathway – page 2**



Page 60 of 60



# **Tissue Viability Service and Referral Pathway**

Document ID Number	2285
Version:	V1
Ratified by:	Pressure Ulcer Steering Group
Date ratified:	August 2020
Name of author and title:	<ul><li>Team Lead</li><li>Tissue Viability</li><li>Tissue Viability</li><li>Tissue Viability</li></ul>
Date originally written:	August 2020
Date current version was completed	August 2020
Name of responsible committee/individual:	Pressure Ulcer Steering Group
Division/Speciality:	Corporate/Tissue Viability
Date issued:	11 October 2021
Review date:	August 2023
Target audience:	All Clinical Staff involved in wound management within ESHT
Compliance with CQC Fundamental Standard	N/A
Compliance with any other external requirements (e.g. Information Governance)	N/A
Associated Documents:	Guideline for management of lower leg ulceration Policy and procedure for the use of Negative Pressure Wound Therapy Policy and procedure for the use of sterile Maggots in wound management Pressure Ulcer Prevention and management Policy and procedure for wound management and decision cards

Did you print this yourself?

Please be advised the Trust discourages retention of hard copies of the procedural document and can only guarantee that the procedural document on the Trust website is the most up to date version

## **Version Control Table**

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1	August 2020		New Document	

## **Consultation Table**

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or	Title	Date
group		
	Tissue Viability Specialist	Aug 2020
	Tissue Viability Specialist	Aug 2020
	Tissue Viability Specialist	Aug 2020
Tina Lloyd	Assistant Director of Nursing	Aug 2020
Mika Dave	Acute Foot & At Risk Foot	Aug 2020
	Lead	-

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

## **Table of Contents**

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#### 1. Service Description

The Tissue Viability Service provides specialist evidence based advice to all Healthcare Professionals, patients, families and carers. All patients are eligible for referral to our service, in Hastings & Rother or in-patient in East Sussex Healthcare Trust (ESHT) acute hospitals and meet the referral criteria

#### 2. Aims and Objectives

- To assess, plan and provide high quality individualised specialist care
- To provide patients and carers with the information required to make informed decisions about their condition
- To treat every individual with dignity and respect
- To provide an advisory service to other Health Care professionals
- To enable individuals with disabilities and long term conditions to achieve quality of life and independence
- To standardise practice across all health care settings and work in line with government directive and national guidelines

#### 3. Scope of Service

The Tissue Viability Service acts as a specialist resource to ESHT within the two acute hospital sites and Hasting & Rother CCG in the community. The service gives advice to all healthcare professionals, patients and carer's on the management of wounds that are complex in nature or failing to respond to treatment

#### 3.1 The Tissue Viability Specialist Nurse Role:

- To provide specialist advice to patients and Healthcare professionals to improve patient outcomes
- Support commissioning, procurement and equipment management contacts
- Develop and implement guidelines to support care
- Facilitate Trusts Pressure Ulcer Review Group and clinical lead on the Pressure Ulcer steering group
- Facilitate a link nurse system
- Develop and update wound care formulary
- Develop clinical guidelines in relations to Tissue Viability
- Facilitate staff professional development
- Support healthcare with cost effective prescribing and equipment selection
- Devise teaching and manage educational programmes for health care professionals
- Manage the provision of Negative Pressure Wound Therapy treatment

#### 4. Introduction to Referral Pathway

- The Tissue Viability Referral Pathway provides guidance on referral to the East Sussex Healthcare Trust Tissue Viability Team. It is designed to be used for acute in-patients and patients within the Hastings & Rother CCG
- It is the responsibility of every practitioner caring for patients with tissue viability needs to possess skills in pressure ulcer prevention, and wound assessment and management. East Sussex Healthcare staff should be able

to access training when needed to maintain competence in these areas of practice

- The tissue viability team do not provide a routine wound management service but will provide assessment, advice and support as required in the management of complex patients, or where complex dressing regimes are commenced the tissue viability team may review the patient on a regular basis. However, accountability for the patient remains with the nursing staff who regularly care for the patients wound
- The tissue viability link practitioner, community nursing practitioner, or equally
  experienced member of the team should be the first point of contact when
  seeking advice on aspects of patient care. When he/she is unavailable or are
  unable to provide the level of care required a referral to the tissue viability
  service is made
- A member of the Medical, Surgical or GP team should also be aware of the patients wound
- In the absence of a member of the tissue viability team it is the nursing staff responsibility to devise a care plan to ensure effective wound management

#### 5. Purpose of the Pathway

The aim of this pathway is to provide guidance for staff on accessing tissue viability services. The pathway covers all patients across acute in-patient beds in East Sussex Healthcare Trust, and Hastings & Rother CCG with tissue viability needs. There are separate pathways for vascular, diabetic foot, cellulitis in community and lymphedema. These will be signposted in our flowchart (Appendix 1)

The referral pathway applies to all staff caring for adult patients with wounds, who recognise that specialist tissue viability will enhance their patient's management by delivery of high quality specialist clinical care, advice, and support with patient/staff education. The service is designed to ensure patients requiring tissue viability intervention are seen in a timely manner that promotes optimum treatment

#### 6. Tissue Viability Team

The tissue viability team consists of:

- Tissue Viability Team Lead x 1 Band 7
- Tissue Viability Specialist Nurse x 1 Band 7
- Tissue Viability Specialist Nurse x 2.8 Band 6

The tissue viability service provides policies, procedures and guidelines, based on the best available evidence and a comprehensive education programme. These are available on the ESHT extranet

Tissue viability is an advisory service, patients will not be routinely reviewed by the team and responsibility for care of the patient lies with staff in the clinical setting

The tissue viability team will be responsible for audit of referrals to ensure the pathway is followed

The tissue viability service is supported by a network of link practitioners, who provide support within their own clinical areas

#### 7. Staff Responsibility for Tissue Viability

#### 7.1 The Role of Tissue Viability Link Practitioners

Tissue viability link practitioners will be the first point of contact for ward staff for patients with tissue viability concerns and staff requiring additional support

Tissue viability link practitioners will provide clinically based education for colleagues within their own clinical areas dependent upon the individual client group

Tissue viability link practitioners will undertake additional education to ensure they can meet the needs of their own clinical environments and the tissue viability team will facilitate this learning with the support of industry

#### 7.2 Role of Individual Staff Member

All staff caring for patients with tissue viability needs should be able to demonstrate competence in pressure area care, aseptic technique, wound management and dressing selection

All staff should be able to access education and relevant procedures, policies and guidelines to support clinical decision making. Training is available via East Sussex Healthcare learning & development department and guidelines on the extranet

All clinical staff caring for patients with tissue viability needs must have skills in wound management and pressure ulcer prevention. Clinical staff must be able to carry out a comprehensive patient assessment, and put a plan in place to protect the patient and/or promote healing until the patient can be reviewed by the link practitioner and/or the tissue viability specialist if necessary

The tissue viability team does not provide a dressing service

#### 8. Standards and Practice for Referral Pathway

#### 8.1 Referral Criteria

The tissue viability service provides assessment and joint management plans for:

- Leg ulceration with ABPI > 0.8
- Pressure ulcers Category 3 & 4, or patient with complex offloading issues (community)
- In acute TVN will review datix for Cat 3 /4 , DTI or unstageable damage
- Patients with complex co-morbidities with non-healing wounds
- Non-healing wound or not responding as expected to treatment by health care professional (HCP) after 6 weeks , if the plan has not been effective after 4-6 week refer back or the patient will be discharged from the TV service
- Advice for pressure relieving and reducing equipment or complex offloading issues
- Patients deemed suitable for Negative pressure wound therapy (NPWT) by a HCP
- Patients deemed suitable for Maggot therapy and require specialist prescription
- Deteriorating fungating wounds

- Surgical wounds with dehiscence that are not managed by acute surgical team
- Educational support in the management of Tissue Viability issues

#### 8.2 Exclusion Criteria

- Patients that have had no prior wound assessment by the referring HCP
- Uncomplicated Category 2 pressure ulcers
- Peripheral arterial disease ABPI< 0.5 (Direct referral to vascular services) or ABPI 0.8 with monophasic signals
- Patients with skin conditions but no open wounds referral should be made to direct to Dermatology
- Patients with suspected malignancy, inflammatory or autoimmune ulceration to refer direct to dermatology
- Any patient with diabetes and a foot wound to be referred to Diabetic Foot Clinic and Vascular Team
- Patient's whose condition is being managed by the Vascular service and they have not requested Tissue Viability service input
- Lymphedema to be referred direct to Lymphedema Specialist
- · Patients with wounds that are healing as expected
- Non concordant patients who have been advised by the Tissue viability service on previous occasions and have declined all treatment options offered and have indicated they do not wish to take further advice from the Tissue Viability service
- Life or limb threatening wounds direct to primary provider i.e. A&E
- Patients previously seen by the tissue viability team who have no new identified wound related complications
- The community tissue viability service is commissioned for Adult patients only
- ESHT tissue viability service are not commissioned to provide a service to Acute Mental Health Facilities

#### 8.3. Assessment prior to referral

- Prior to referring to the tissue viability service the HCP has assessed and treated within shared protocol, guidelines and wound care formulary. With Doppler assessment essential for all presentations of lower limb wounds to community TV service
- Use of the wound management decision cards (in wound management policy)
  to complete full holistic assessment of the patient and documented on the
  Wound assessment chart: Wound size, wound site, wound characteristics,
  current treatment and investigations completed and photographic evidence

#### 8.4 Making a Referral

Acute referrals to be made using the electronic Tissue Viability Referral Request Form via esearcher (Appendix 2): <a href="mailto:esht.acutetissueviability@nhs.net">esht.acutetissueviability@nhs.net</a>

Community Tissue Viability Referral form available via Systmone (Appendix 3) to be sent to:

esh-tr.communitytissueviability@nhs.net

**No telephone referrals will be accepted** to allow Tissue Viability service to audit appropriateness of referral with monitoring of response

#### 8.5 Response times

Acute Referrals - Depending on triage response will be up to 4 working days

Community Referrals - From receipt of referral electronically the TVN service will contact the healthcare professional or patient with 2 working days by telephone, email or letter to triage into these categories:

<u>Very Urgent Referrals</u> - Patients with very complex conditions or complex wounds. (Pressure ulceration Category 3, 4 or DTI in acute)

 Within 24hrs (Mon-Friday) from date of referral – Tissue viability to contact referrer, advise and agree a plan of care or arrange a joint visit if more appropriate within 3 working days

<u>Urgent referrals</u> - Patients with less complex wounds and conditions

 Contact with the referrer as above, advise and agree a plan of care and arrange a joint visit within 10 working days

.

## 9. Document Monitoring Table

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Relevant referrals	Tissue viability team	In-house monitoring	Ad-hoc	Tissue Viability Team/PUSG	Tissue Viability Team	Tissue Viability Team

#### **Tissue Viability Referral Flow Chart**

#### Actions before referring to TVN:

Have you completed a Wound Care Assessment?

Is there a wound care plan in place?

Have you used the wound care decision cards to guide your plan?

Did you consult with your TV link practitioner/Senior member of the team?

Is the medical/surgical/GP team aware?

Is the wound responding to your treatment plan?

Does the patient meet the Referral Criteria?

### **Tissue Viability Referral:**

- Full assessment recorded in the patients notes with wound care chart
- 2. Detailed description of wound type, measurement, and other investigations
- 3. Photographic images
- Patient not responding to treatment/complex wound management issues

#### Send Tissue Viability Referral:

Community Referral Form on SystmOne, email to: <u>esh-</u> <u>tr.communitytissueviability@nhs.net</u>

Acute Referral Form to be completed and sent via esearcher

Acute referrals from external source should be emailed to: esht.acutetissueviability@nhs.net

## Refer Direct to other Specialist Services:

- 1. ABPI < 0.5 to vascular services
- ABPI < 0.8 with monophasic arterial signals to vascular services
- Cellulitis suspected in community refer to East Sussex Cellulitis Pathway
- 4. Lymphoedema Services
- Podiatry or Vascular Team if Diabetic with a foot wound
- 6. Dermatology if skin conditions without broken skin
- 7. Patients with suspected malignancy, inflammatory or autoimmune ulceration direct to Dermatology



## **Appendix 2 - Acute Tissue Viability Referral Form**

Acute Tissue Viability Refer	<u>rral Form</u>		
Patients Name	Patients NHS/	'Unit	no
Referrers name with contact r	no		
Have you reviewed the wou wound assessment docume		e rev	view wound prior to referral and complete
Does this patient/wound meet other Specialist	t the Tissue Viability Referr	al Cri	iteria: Yes / No. <b>If No</b> Refer to relevant
Has the medical team reviewe	ed the wound: Yes / No		
Current concerns regarding th	ne wound <u>with current wour</u>	<u>ıd tre</u>	eatment plan
Wound swab taken date:	Result:		Treatment
Medical Illustrations: Y/N			
Wound type (*)			
Pressure Ulcer Review	Moisture Lesion		
Cellulitis *	Leg Ulcer		
Surgical Wound	Orthopaedic review		
Skin laceration/tear	NPWT review		
Burn	Fungating wound		
Other			

 $\hbox{$^*$ \textbf{Cellulitis}-\underline{\sf REMEMBER}$ Strict High Elevation, simple protective dressings, skin care with antibiotics.}$ 

Doc ID: 0097 - V1 -October 2021 -October 2024

## **Appendix 3 - Community Wound Care Referral Form**

## EHS, H&R, HWLH CCG WOUND CARE REFERRAL FORM

Practice: Referred by:				
GP: Referrer Cor		ntact Number:		
Patient Name:	ail :			
Patient Address:		ferral including transfer of personal data and graphy? Yes No		
		person have capacity to give consent? If not, has ral been completed in the person's best interest?		
Patient DOB:	Referral Dat	e:		
Patient NHS No:	Patient Ethr	ic Origin:		
Patient Phone No:	Urgency of	Referral: Low Medium High		
W	OUND DETAI	LS		
Type of wound:		Date of Onset:		
Location of wound:		BMI:		
PRESSURE ULCERS:		DIABETIC FOOT ULCER		
Pressure ulcer grade: 1 ☐ 2 ☐ 3 ☐ DTI: ☐ Unstageable: ☐	4 🔲	Grade: (Texas)		
Waterlow score: At risk High risk Very high risk		Charcot joint: Yes No L		
Pressure reducing/relieving equipment :  Domestic Mattress Static Pressure relieving Mattress  Dynamic Air Mattress Other Please specify:		Referred to DFU clinic: Yes No No Previous amputation: Yes No No Referred to Vascular TVN:		
Modular cushion Domestic mattress Static air cushion Alternating cushion		Bone /tendon exposed:Yes No No No No		
Heels offloaded (static air) Heels placed on the floor Other: (state)		Blood sugars stable: Yes No No Recent HBA1C:		
Mobility: Bed bound ☐ Chair bound ☐ Fully mobile ☐ Mobile with Aid ☐				
Nutrition: MUST score: Diet : Adequa	te Inade	quate Supplements : Yes No		
Photograph attached /sent: Yes No (referrals will not be processed without images)		Doppler results : N/A□Date:Left ABPI=Right ABPI=		
Healing Status: Wound healing Deterior	ic > 6wks Static >12 wks			

Exudate: None  Minimal	Moderate	High Colour:				
Current Wound Treatment :						
Wound Infection: Yes No	If yes state infec	tion present (if known):				
Wound swab taken: Yes	lo Antibiotics col	mmen <u>ced</u> /requeste <u>d: Y</u> es 🔲 <u>No</u> 🔲				
Other symptoms: Cellulitis	increased exudate	Pain Malodour Pyrexia				
Other: (state)						
Wound bed Condition: (show %)		Wound Dimensions (cms)				
Healthy granulation <sub>(red)</sub> Ned	crosis (black)	Max length: Max width: Max depth:				
Hypergranulation <sub>(raised)</sub> Slow	ugh(yellow /grey)	Undermining/tunelling: Yes  No				
Other:(state)						
Pain: Yes No Score 0-10	Peri wo	und/skin: (Tick all that apply): Healthy				
Score:	Haemat	oma 🔲 oedema🔲 excoriation 🗖				
Analgesia: (type)	Moist/m	aceration Dry/flaky D				
	dermati	is/eczema Other (state)				
	Medical History	(tick all that apply)				
Diabetes Peripheral arteria		matoid arthritis Malignancy/end of life				
State other medical History :						
	Medications (t	ick all that apply)				
Steroids Warfarin Insulin	<u></u>	tics Tramadol				
Anti hypertensives  Please	list all others (including r	ecent antibiotic therapy)				
	For Office I	los Only				
Date received:	For Office U					
Triaged by:	Signatu	<u> </u>				
	Outco					
Domicillary Visit:  Clinic	appointment:	Remote Care plan: Date sent:				
Appointment Date: Assessment Time: Assessing Clinician :						
	Appointment confirmed with:					
		<del></del>				
Comments:						
Signature: Na	ame:	Date: Time:				

For EHS CCG send referral & photograph via nhs mail to: EHSCCG.referralswhc@nhs.net
Or for enquiries call Healogics Wound Healing Centre:

For H&R CCG send referral & photograph via nhs mail to: esh-tr.communitytissueviability@nhs.net or for enquiries call

#### Appendix 4 - EHRA Form

A Due Regard, Equality and Human Rights Analysis form must be completed for all procedural documents used by East Sussex Healthcare NHS Trust. Guidance for the form can be found on the <a href="Equality and Diversity Extranet">Equality and Diversity Extranet</a> page.

## Due Regard, Equality and Human Rights Analysis

#### Title of document:

Tissue Viability Service and Referral Pathway

Who will be affected by this work? E.g. staff, patients, service users, partner organisations etc.

Clinical staff, patients, service users

### Please include a brief summary of intended outcome:

Patients/service users will be appropriately referred into the tissue viability service.

		Yes/No	Comments, Evidence				
			and Link to main content				
	Does the work affect one group les	ss or mor					
1.	another on the basis of: (Ensure you comment on any affected						
	characteristic and link to main policy with page/paragraph number)						
	Age	YES	Commissioned for adults				
			only community service				
	<ul> <li>Disability (including carers)</li> </ul>	No					
	Race	No					
	<ul> <li>Religion &amp; Belief</li> </ul>	No					
	Gender	No					
	<ul> <li>Sexual Orientation (LGBT)</li> </ul>	No					
	<ul><li>Pregnancy &amp; Maternity</li></ul>	No					
	<ul> <li>Marriage &amp; Civil Partnership</li> </ul>	No					
	<ul> <li>Gender Reassignment</li> </ul>	No					
	<ul> <li>Other Identified Groups</li> </ul>	No					
	Is there any evidence that some	No					
2.	groups are affected differently						
	and what is/are the evidence						
	source(s)?						
3.	What are the impacts and	Patients/service users may not be					
	alternatives of implementing /		to the most appropriate				
	not implementing the work /		n a timely manner				
	policy?	therefore potentially delaying					
	treatment. Section 8, Appendix 1						
	Please evidence how this work / This Pathway contributes to						

<b>4</b> . <b>5</b> .	policy seeks to "eliminate unlawful discrimination, harassment and victimisation" as per the Equality Act 2010?  Please evidence how this work /	ensuring patients/service users are referred to the most relevant service  This Pathway contributes to
	policy seeks to "advance equality of opportunity between people sharing a protected characteristic and those who do not" as per the Equality Act 2010?	ensuring patients/service users are referred to the most relevant service
6.	Please evidence how this work / policy will "Foster good relations between people sharing a protected characteristic and those who do not" as per the Equality Act 2010?	This Pathway contributes to ensuring patients/service users are referred to the most relevant service
7.	Has the policy/guidance been assessed in terms of Human Rights to ensure service users, carers and staff are treated in line with the FREDA principles (fairness, respect, equality, dignity and autonomy)	N/A
8.	Please evidence how have you engaged stakeholders with an interest in protected characteristics in gathering evidence or testing the evidence available?	N/A
9.	Have you have identified any negative impacts or inequalities on any protected characteristic and others? (Please attach evidence and plan of action ensure this negative impact / inequality is being monitored and addressed).	No

#### FOI 25/207 - East Sussex Healthcare NHS Trust

#### Other Dressings

Supplier Name	Description	Product Code	Pack Size	Pack Qty Qty	у
Btme Group Ltd (Medtree)	Dressing Fabric Coated With Celox	FA014	1	10	10
Medisave Uk Ltd	Dressing Film 10.5Cm X 12Cm	296500	10	2	20
Solventum	Dressing Abthera Open Abdomen	M8275026/5	5	1	5
Unisurge International Ltd	Burns Dressing	F811027	36	50	1,800
Unisurge International Ltd	Dressing Gamgee Dble Wrapped 45 X 45Cm	F900074	15	145	2,175
Unisurge International Ltd	Towel Dressing 38 X 43Cm	F821005	300	24	7,200
365 Healthcare	Dressing towel 2 ply sterile 38 x 43cm 2ply dressing towel	36519061	1	1458	1,458
366 Healthcare	Dressing towel 2 ply sterile 75 x 75cm 2 ply dressing towel sterile	36519062	1	171	171
367 Healthcare	Dressing Adhesive Island Non Woven Fabric Semi Permeable Backing Sterile 5cm x 7.2cm (wcp 2.5cm x 4cm)	36590001	50	14	700
368 Healthcare	Dressing Adhesive Island Non Woven Fabric Semi Permeable Backing Sterile 6cm x 8cm (wcp 3cm x 4cm)	36590039	60	2	120
369 Healthcare	Dressing vapour-permeable adhesive film with absorbent pad sterile 12cm x 10cm (wcp 5cm x 7.5cm)	TJ36590021	50	1	50
365 IV Film	Dressing IV vapour-permeable adhesive film sterile 7cm x 9cm	36590018	50	69	3,450
366 IV Film	Dressing IV vapour-permeable adhesive film sterile 5cm x 5.7cm	36590041	100	44	4,400
367 IV Film	Dressing IV vapour-permeable adhesive film sterile 7cm x 8.5cm peripheral line dressing for cannula fixation	36590046	50	3111	155,550
365 NA DRESSING	Low/Non Adherent Absorbent Dressing Pad with perforated polyester film on two sides sterile 10cm x 10cm	36519078	50	2	100
366 NA DRESSING	Low/Non Adherent Absorbent Dressing Pad with perforated polyester film on two sides sterile 10cm x 10cm	TJ36519078	50	1	50
365 Transparent Film	Dressing vapour-permeable adhesive film sterile 4cm x 5cm	36590006	100	3	300
366 Transparent Film	Dressing vapour-permeable adhesive film sterile 6cm x 7cm	36590007	100	14	1,400
367 Transparent Film	Dressing vapour-permeable adhesive film sterile 10cm X 12cm	36590008	50	171	8,550
368 Transparent Film	Dressing vapour-permeable adhesive film sterile 10cm x 25cm	36590010	30	13	390
369 Transparent Film	Dressing vapour-permeable adhesive film sterile 4cm x 5cm	TJ36590006	100	5	500
365 Transparent Island	Dressing vapour-permeable adhesive film with absorbent pad sterile 5cm x 7.2cm (wcp 2.5cm x 3.7cm)	36590019	50	370	18,500
366 Transparent Island	Dressing vapour-permeable adhesive film with absorbent pad sterile 8.5cm x 15.5cm (wcp 4cm x 11.5cm)	36590022	50	87	4,350
367 Transparent Island	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 20cm (wcp 5.5cm x 15cm)	36590023	50	20	1,000
368 Transparent Island	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 30cm (wcp 5.5cm x 25.5cm)	36590025	50	9	450
ActiformCool	Hydrogel dressing non adhesive 20cm x 20cm square	88303	3	2	6
Actilite	Wound contact layer antimicrobial honey dressing Viscose Net with 99percent Manuka Honey and 1percent Manuka Oil 5cm	> CR4281	10	3	30
ActivHeal	Alginate standard dressing 10cm x 10cm	10007431	10	3	30
ActivHeal	Alginate standard dressing 5cm x 5cm	10007432	10	28	280
ActivHeal	Foam tracheostomy dressing 10cm x 10cm tracheostomy	10009118	10	73	730
ActivHeal	Wound contact layer silicone dressing two sided 5cm x 7cm	10012637	10	1	10
ActivHeal	Wound contact layer silicone dressing two sided 10cm x 10cm	10012638	10	3	30
Activon Tulle Advancis	Specialist wound care honey dressing Knitted Viscose Mesh with 100percent Manuka Honey 10cm x 10cm	CR3658	5	10	50
Activon Tulle Advancis	Specialist wound care honey dressing Knitted Viscose Mesh with 100percent Manuka Honey 5cm x 5cm	CR3761	5	24	120
Adaptic Touch	Wound contact layer silicone dressing two sided 5cm x 7.6cm	TCH501	10	2	20
Adpore Ultra	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 10cm	62974	40	2	80
Advancis	Tracheostomy Dressing Advazorb fixation post-decannulation tracheostomy dressing	CR/4341	10	15	150
Advancis	Tracheostomy Dressing Advadraw T	CR4416	20	43	860
Advancis Actilite	Wound contact layer antimicrobial honey dressing Viscose Net with 99percent Manuka Honey and 1percent Manuka Oil 10cr	n CR3849	10	2	20
Advazorb border	Foam dressing silicone including adhesive border Hydrophllic with Soft Silicone Wound Contact Layer 10cm x 30cm (WCP 6.	9 CR4196	10	3	30

Supplier Name	Description	Product Code	Pack Size	Pack Qty Qty	<b>,</b>
Allevyn AG Gentle Border	Foam dressing antimicrobial silicone including adhesive border 10cm x 10cm silver impregnated (wcp 7.5cm x 7.5cm)	66800461	10	1	10
Allevyn AG Gentle Border	Foam dressing antimicrobial silicone including adhesive border 12.5cm x 12.5cm silver impregnated (wcp 10cm x 10cm)	66800462	10	2	20
Allevyn Gentle Border	Foam dressing silicone including adhesive border 7.5cm x 7.5cm (5cm x 5cm)	66800269	10	17	170
Allevyn Gentle Border	Foam dressing silicone including adhesive border 10cm x 10cm (wcp 7.5cm x 7.5cm)	66800270	10	2	20
Allevyn Gentle Border	Foam dressing silicone including adhesive border 12.5cm x 12.5cm (wcp 10cm x 10cm)	66800272	10	1	10
Allevyn Gentle Border	Foam sacral dressing silicone including adhesive border 16.8cm x 17.10cm sacral (wcp 12.1cm x 12.4cm)	66800898	10	3	30
Allevyn Gentle Border Lite	Foam dressing silicone including adhesive border 7.5cm x 7.5cm lite dressing (5cm x 5cm)	66800834	10	3	30
Allevyn Gentle Border Lite	Foam dressing silicone including adhesive border 10cm x 10cm lite dressing (wcp 7.5cm x 7.5cm)	66800835	10	5	50
Allevyn Life	Foam dressing silicone including adhesive border 12.9cm x 12.9cm (wcp 7.6cm x 7.6cm)	66801068	10	1	10
Allevyn Life Sacrum	Foam sacral dressing silicone including adhesive border 17.2cm x 17.5cm sacrum (wcp 12.5cm x 8.5cm)	66801306	10	3	30
Allevyn Life Sacrum	Foam sacral dressing silicone including adhesive border 21.6cm x 23cm sacrum (wcp 17cm x 12.3)	66801307	10	1	10
Allevyn Non Adhesive	Foam heel dressing non bordered 10.5cm x 13.5cm heel	66007630	5	1	5
Allevyn Non Adhesive	Foam tracheostomy dressing 9cm x 9cm tracheostomy	66007640	10	1	10
Allevyn Non Adhesive	Foam dressing non bordered 10cm x 10cm square	66157637	10	4	40
Aquacel Ag + Extra	Gelling fibre antimicrobial dressing 5x5cm silver impregnated	413566	10	153	1,530
Aquacel Ag + Extra	Gelling fibre antimicrobial dressing 10x10cm silver impregnated	413567	10	277	2,770
Aquacel Ag + Extra	Gelling fibre antimicrobial dressing 15x15cm silver impregnated	413568	5	6	30
Aquacel Ag+ Ribbon	Gelling fibre antimicrobial dressing 2cm x 45cm silver impregnated	413571	5	26	130
Aquacel Extra	Gelling fibre dressing Two layer hydrofiber 5cm x 5cm	420671	10	1066	10,660
Aquacel Extra	Gelling fibre dressing Two layer hydrofiber 10cm x 10cm	420672	10	1454	14,540
Aquacel Extra	Gelling fibre dressing Two layer hydrofiber 15cm x 15cm	420673	5	26	130
Aquacel Foam	Foam dressing adhesive including adhesive border Dressing hydrofiber contact layer with polyurethane foam film backing ar	nd 421149	10	1	10
Aquacel Foam Adhesive	Enhanced foam dressing adhesive including adhesive border 12.5cm x 12.5cm (wcp 8.5cm x 8.5cm) with hydrofiber contact	la 420619	10	7	70
Aquacel Foam Adhesive	Enhanced foam dressing adhesive including adhesive border 10cm x 10cm (wcp 7cm x 7cm) with hydrofiber contact layer an	nd 420680	10	2	20
Aquacel Foam Adhesive	Enhanced foam dressing adhesive including adhesive border 8cm x 8cm (5.5cm x 5.5cm) with hydrofiber contact layer and p	00 420804	10	1	10
AQUACEL Foam non adhesive	Enhanced foam dressing non bordered 5cm x 5cm with hydrofiber contact layer and polyurethane film backing	420631	10	2	20
AQUACEL Foam non adhesive	Enhanced foam dressing non bordered 10cm x 10cm with hydrofiber contact layer and polyurethane film backing	420633	10	1	10
AQUACEL Foam non adhesive	Enhanced foam dressing non bordered 15cm x 15cm	420635	5	1	5
Aquacel Ribbon	Gelling fibre dressing 1cm x 45cm	420127	5	32	160
Aquacel Ribbon	Gelling fibre dressing 2cm x 45cm	S7503	5	102	510
Aquacel Surgical	Gelling fibre dressing surgical 9cm x 15cm (wcp 3cm x 9cm)	412018	10	6	60
Aquacel Surgical	Gelling fibre dressing surgical 9cm x 25cm (wcp 3cm x 17cm)	412019	10	18	180
Aquacel Surgical	Gelling fibre dressing surgical 9cm x 35cm (wcp 3cm x 27cm)	412020	10	11	110
Askina DresSil Border	Foam dressing silicone including adhesive border 10cm x 10cm (WCP 7cm x 7cm)	5391010	10	2	20
Askina DresSil Border	Foam dressing silicone including adhesive border 10cm x 10cm (WCP 7cm x 7cm)	ADM5391010	10	12	120
Atos	Tracheostomy Dressing Absorbent for keeping the stoma area dry and making management easier non-sterile size 60x82mm	n TRDRE1001	20	25	500
Atos	Tracheostomy Dressing Absorbent for keeping the stoma area dry and making management easier non-sterile size 80x100m	m TRDRE1002	20	30	600
Atrauman	Wound contact layer impregnated polymer dressing 5 x 5cm	499510	10	14	140
Atrauman	Wound contact layer impregnated polymer dressing 7.5 x 10cm	499513	10	449	4,490
Atrauman	Wound contact layer impregnated polymer dressing 20cm x 30cm	499515	10	305	3,050
Atrauman	Wound contact layer impregnated polymer dressing 10cm x 20cm	499536	30	202	6,060
Atrauman	Wound contact layer impregnated polymer dressing 5cm x 5cm	499550	50	187	9,350

Supplier Name	Description	Product Code	Pack Size	Pack Qty Qty	У
Atrauman	Wound contact layer impregnated polymer dressing 7.5cm x 10cm	499553	50	313	15,650
Atrauman AG	Wound contact layer antimicrobial silver dressing 5cm x 5cm	499571	10	588	5,880
Atrauman AG	Wound contact layer antimicrobial silver dressing 10cm x 10cm	499573	10	54	540
Atrauman AG	Wound contact layer antimicrobial silver dressing 10cm x 20cm	499575	10	55	550
Bactigras	Wound contact layer antimicrobial chlorhexidine dressing 10cm x 10cm	7457	10	3	30
Biatain Adhesive	Foam sacral dressing adhesive including adhesive border 23cm x 23cm sacral (wcp 13cm x 13cm plus border 5cm)	3485	5	17	85
Biatain Ag	Foam dressing antimicrobial non bordered 10cmx10cm square silver impregnated	9622	5	3	15
Biatain Alginate	Alginate standard dressing 15cm x 15cm	3715	10	8	80
Biatain Alginate	Alginate standard dressing 44cm ribbon	3740	6	426	2,556
Biatain Contact	Wound contact layer silicone dressing one sided 5 x 7.5	33560	5	3	15
Biatain Contact	Wound contact layer silicone dressing one sided 7.5 x 10	33561	5	6	30
Biatain Contact	Wound contact layer silicone dressing one sided 10 x 18	33562	5	1	5
Biatain Silicone	Foam dressing silicone including adhesive border 10cm x 20cm	33400	5	4	20
Biatain Silicone	Foam dressing silicone including adhesive border 10cm x 30cm	33401	5	3	15
Biatain Silicone	Foam sacral dressing silicone including adhesive border 15cm x 19cm	33404	5	1217	6,08
Biatain Silicone	Foam sacral dressing silicone including adhesive border 25cm x 25cm	33405	5	18	90
Biatain Silicone	Foam dressing silicone including adhesive border 7.5cm x 7.5cm (wcp 4.5cm x 4.5cm)	3343431006	10	436	4,360
Biatain Silicone	Foam dressing silicone including adhesive border 10cm x 10cm (wcp 6.5cm x 6.5cm)	3343531006	10	728	7,28
Biatain Silicone	Foam dressing silicone including adhesive border 12.5cm x 12.5cm (wcp 8.5cm x 8.5cm)	3343631006	10	1313	13,130
Biatain Silicone	Foam dressing silicone including adhesive border 15cm x 15cm (wcp 10.5cm x 10.5cm)	3343731006	5	1	į
Biatain Silicone	Foam dressing silicone including adhesive border 17.5cm x 17.5cm (wcp 13cm x 13cm)	3343831006	5	2	10
Biatain Silicone Ag Sacral	Foam sacral dressing antimicrobial silicone including adhesive border 15cm x 19cm	39650	5	26	130
Biatain Silicone Lite	Foam dressing silicone including adhesive border 7.5cm x 7.5cm (wcp 4.5cm x 4.5cm) silicone adhesive hydrocellular foam	d:33444	10	240	2,400
Biatain Silicone Lite	Foam dressing silicone including adhesive border 10cm x 10cm (wcp 6.5cm x 6.5cm) silicone adhesive hydrocellular foam d	r€ 33445	10	2	2
Biatain Silicone Lite	Foam dressing silicone including adhesive border 12.5cm x 12.5cm (wcp 8.5cm x 6.5cm) silicone adhesive hydrocellular foa	rr 33446	10	264	2,640
Biatain Silicone Lite	Foam dressing silicone including adhesive border 5cm x 5cm adhesive hydrocellular foam dressing	3345201006	5	15	75
Biatain Silicone non-bordered	Foam dressing silicone non bordered 7.5 x 7.5	39021	10	6	60
Biatain Silicone non-bordered	Foam dressing silicone non bordered 10 x 10	39022	10	10	100
Biatain Silicone non-bordered	Foam dressing silicone non bordered 12.5 x 12.5	39023	10	4	40
Biatain Soft-Hold	Foam dressing non bordered 10cm x 10cm soft-hold (wcp 10cm x 10cm)	3470	5	3	1
Blue Dot	Dressing Adhesive Island Non Woven Fabric Semi Permeable Backing Sterile 7cm x 8cm (wcp 3cm x 4cm)	800028	50	19	950
Carboflex Convatec	Odour control standard carbon dressing 10cm x 10cm	S7660	10	4	40
Cavidagel burn dressing	Burns management dressing 10cm x 10cm sterile hydrogel burn dressing	CAVIBURN100100	20	1	20
ClearFilm	Dressing vapour-permeable adhesive film sterile 6cm x 7cm	815067	100	6	600
ClearFilm	Dressing vapour-permeable adhesive film sterile 10cm X 12cm	815112	50	20	1,000
ClearFilm	Dressing vapour-permeable adhesive film sterile 15cm x 20cm	815215	50	21	1,050
ClearFilm	Dressing vapour-permeable adhesive film sterile 20cm x 30cm	815230	10	1	10
ClearFilm IV	Dressing IV vapour-permeable adhesive film sterile 5cm x 5.7cm paediatric peripheral catheter	816020	100	1	100
ClearFilm IV	Dressing IV vapour-permeable adhesive film sterile 6cm x 7cm peripheral catheter	816040	100	4	400
ClearFilm IV	Dressing IV vapour-permeable adhesive film sterile 7cm x 8.5cm peripheral catheter	816060	100	304	30,40
Comfeel Plus Transparent	Hydrocolloid transparent dressing 10cm x 10cm square	33533	10	4	4
CoolTherm	Burns management dressing 5cm x 15cm	5921	120	1	120

Supplier Name	Description	Product Code	Pack Size	Pack Qty Qty	1
CoolTherm	Burns management dressing 10cm x 10cm	5922	15	1	15
Cosmopor E	Dressing adhesive island non woven fabric sterile 5cm x 7.2cm (wcp 2.5cm x 4cm) with synthetic rubber based adhesive	900870	50	1	50
Cuticell Classic	Wound contact layer paraffin dressing 5cm x 5cm WARNING Flammable product DO NOT Smoke or go near Naked Flames Ea	a: 7253800	5	2	10
Cutimed siltec B	Foam dressing silicone including adhesive border 7.5cm x 7.5cm	73284-00	10	10	100
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing Sorbact coated with DACC absorbent pad 7cm x 9cm	7216116	5	2	10
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing 10cm x 10cm	7216217	40	2	80
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing 4cm x 6cm swabs	7216416	40	2	80
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing 4cm x 6cm swab sorbact coated with DACC	7216417	5	9	45
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing 4cm x 6cm swab sorbact coated with DACC	72164-17	5	18	90
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing 4cm x 6cm swab sorbact coated with DACC	7216433	5	1	5
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing 7cm x 9cm swab sorbact coated with DACC	7216515	5	4	20
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing 7cm x 9cm swab sorbact coated with DACC	72165-15	5	31	155
Cutimed Sorbact	Wound contact layer antimicrobial DACC dressing 7cm x 9cm swab sorbact coated with DACC	7216563	5	5	25
Cutimed Sorbact Contact	Wound contact layer antimicrobial DACC dressing 4cm x 6cm (unfolded 11cm x 15cm) DACC Contact Layer	72164-32	40	1	40
Cutimed Sorbact Contact	Wound contact layer antimicrobial DACC dressing 4cm x 6cm (unfolded 11cm x 15cm) DACC Contact Layer	72164-33	5	8	40
Cutimed Sorbact Contact	Wound contact layer antimicrobial DACC dressing 7cm x 9cm (unfolded 17cm x 28cm) DACC Contact Layer	72165-63	5	11	55
Dressit	Dressing Pack Aseptic community dressing pack small to medium	908640	60	6	360
Dressit	Dressing Pack Aseptic community dressing pack medium to large	908650	60	13	780
DryMax Super	Non-backed non-adhesive super absorbent dressing Sterile 10cm x 20cm	F60075/10	10	4	40
DuoDERM Extra Thin	Hydrocolloid thin dressing 4.4cm x 3.8cm oval spots	S001SP	10	18	180
DuoDERM Extra Thin	Hydrocolloid thin dressing 7.5cm x 7.5cm square	S160	5	274	1,370
DuoDERM Extra Thin	Hydrocolloid thin dressing 10cm x 10cm square	S161	10	254	2,540
DuoDERM Extra Thin	Hydrocolloid thin dressing 15cm x 15cm square	S162	10	1	10
DuoDERM Extra Thin	Hydrocolloid thin dressing 5cm x 10cm rectangular	S163	10	28	280
DuoDERM Extra Thin	Hydrocolloid thin dressing 5cm x 20cm rectangular	S164	10	102	1,020
DuoDERM Extra Thin	Hydrocolloid thin dressing 9cm x 15cm rectangular	S171	10	11	110
Duoderm Signal	Hydrocolloid standard dressing 10cm x 10cm square bevelled edge	S166	5	5	25
Duoderm Signal	Hydrocolloid standard dressing 14cm x 14cm square bevelled edge	S167	5	1	5
Durafiber AG	Gelling fibre antimicrobial dressing Hydrocolloid fibrous silver impregnated sterile 20cm x 30cm	66800581	5	3	15
Espuma Gentle Lite Comfort	Foam dressing silicone including adhesive border 5cm x 12.5cm (wcp 2.5cm x 7cm)	ESPGCL50125	5	14	70
FarlaSORB	Backed non-adhesive super absorbent dressing sterile 20cm x 20cm	545342	5	1	5
Foamlite ConvaTec Dressing	Foam dressing silicone including adhesive border 10cm x 10cm lite dressing (wcp 6.5cm x 6.5cm) hydrophilic with polyuretha	a 421559	10	6	60
Foldex	Dressing towel Foldex 43 x 38cm white 2 ply folded crepe tissue non sterile	D061	100	168	16,800
Foldex	Dressing towel 76 x 76cm white 2 ply folded crepe tissue non sterile	D065	50	76	3,800
Foldex	Dressing towel 48 x 40cm white 4 ply autoclavable scrim	D066	100	842	84,200
Formula	Dressing Towel 43 x 33cm	F821005	300	4	1,200
Granuflex Bordered	Hydrocolloid dressing including border 6cm x 6cm square(wcp 6cm x 6cm overall dressing 10cm x 10cm)	S155	5	3	15
Granuflex Bordered	Hydrocolloid dressing including border 10cm x 13cm triangular (wcp 10cm x 13cm overall dressing 15cm x 18cm)	S158	10	2	20
Hydrocoll Thin	Hydrocolloid thin dressing 10cm x 10cm square	900758	10	22	220
Inadine	Wound contact layer antimicrobial iodine dressing 5cm x 5cm	P01481	25	484	12,100
Inadine	Wound contact layer antimicrobial iodine dressing 10cm x 10cm	P01491	10	6	60
Inadine	Wound contact layer antimicrobial iodine dressing 9.5cm x 9.5cm	P01512	25	194	4,850

Supplier Name	Description	Product Code	Pack Size	Pack Qty Qty	/
V3000	Dressing IV vapour-permeable adhesive film sterile 7cm x 9cm Two Handed Application	4006	100	3	300
V3001	Dressing IV vapour-permeable adhesive film sterile 10cm x 12cm central line catheters	4008	50	39	1,950
V3002	Dressing IV vapour-permeable adhesive film sterile 6cm x 8.5cm	4924	00	5	-
V3003	Dressing IV vapour-permeable adhesive film sterile 10cm x 14cm	4925	10	2	20
V3004	Dressing IV vapour-permeable adhesive film sterile 10cm x 14cm	4973	50	2	100
V3005	Dressing IV vapour-permeable adhesive film sterile 10cm x 12cm central line catheters with frame delivery system	59410882	50	8	400
V3006	Dressing IV vapour-permeable adhesive film sterile 5cm x 6cm Ported Paediatric Catheter	66004011	100	2	200
V3007	Dressing IV vapour-permeable adhesive film sterile 11cm x 14cm PICC line dressing	66800512	25	1	25
lelonet	Wound contact layer paraffin dressing 5cm x 5cm normal loading individually wrapped WARNING Flammable product DO N	101 7403	50	128	6,400
lelonet	Wound contact layer paraffin dressing 10cm x 10cm normal loading individually wrapped WARNING Flammable product DC	) N 7404	10	263	2,630
Jelonet	Wound contact layer paraffin dressing 10cm x 10cm normal loading individually wrapped WARNING Flammable product DC	N 7409	100	3	300
lelonet	Wound contact layer paraffin dressing 15cm x 2m roll normal loading WARNING Flammable product DO NOT Smoke or go r	nea 7415	12	2	24
lelonet	Wound contact layer paraffin dressing 10cm x 40cm normal loading individually wrapped WARNING Flammable product DC	N 7459	10	88	880
Kalto	Haemostatic dressing Kaltostat	NDK010	10	4	40
Kaltostat	Alginate standard dressing 7.5cm x 12cm	1000	10	60	600
Kaltostat	Alginate standard dressing 10cm x 20cm	1001	10	5	50
Kaltostat	Alginate standard dressing 5cm x 5cm	1004	10	470	4,700
K-Band	Bandage conforming type 1 dressing retention 5cm x 4m knitted	810540	20	372	7,440
K-Band	Bandage conforming type 1 dressing retention 7cm x 4m knitted	810740	20	87	1,740
K-Band	Bandage conforming type 1 dressing retention 10cm x 4m Knitted	811040	20	1228	24,560
K-Band	Bandage conforming type 1 dressing retention 15cm x 4m Knitted	811540	20	68	1,360
KerraCel	Gelling fibre dressing 5cm x 5cm	CWL-1032	10	441	4,410
KerraLite Cool Border	Hydrogel dressing adhesive Superabsorbent hydrated pro ionic gel with adhesive border 11x11cm	CWL1008	5	2	10
Kliniderm foam silicone border	Foam dressing silicone including adhesive border 10cm x 10cm sterile wound dressing	40514829	5	2	10
Kliniderm foam silicone lite bord	e Foam dressing silicone including adhesive border 5cm x 12.5cm lite dressing (wcp 2.5cm x 7.5cm)	40514815	5	2	10
Kliniderm foam silicone lite bord	e Foam dressing silicone including adhesive border 10cm x 10cm lite dressing (wcp 6.5cm x 6.5cm)	40514817	5	8	40
Lomatuell pro	Wound contact layer polymer dressing 5cm x 5cm contains vaseline and hydrocolloid	30870	10	1	10
Melgisorb Plus	Alginate standard dressing 5cm x 5cm	252000-01	10	29	290
Melgisorb Plus	Alginate standard dressing 10cm x 10cm	252200	10	4	40
Melolin	Low/Non Adherent Absorbent Dressing Pad with perforated polyester film on one side sterile 5cm x 5cm	66974940	100	17	1,700
Mepilex Border	Foam sacral dressing silicone including adhesive border 15cm x 15cm (wcp 10cm x 10cm)	282500	5	43	215
Mepilex Border Ag	Foam dressing antimicrobial silicone including adhesive border 7cm x 7.5cm (wcp 4cm x 4.5cm) silver impregnated	395260-00	5	17	8
Mepilex Border Ag	Foam dressing antimicrobial silicone including adhesive border 10cm x 12.5cm (wcp 6.5cm x 8.5cm) silver impregnated	395360-00	5	9	45
Mepilex Border Comfort	Enhanced foam dressing adhesive including adhesive border 12.5cm x 12.5cm (wcp 8.5cm x 8.5cm)	596011	10	73	730
Mepilex Border Comfort	Enhanced foam dressing adhesive including adhesive border 7.5cm x 7.5cm (wcp 4.5cm x 4.5cm)	596211	10	160	1,600
Mepilex Border Comfort	Enhanced foam dressing adhesive including adhesive border 10cm x 10cm (wcp 6.5cm x 6.5cm)	596311	10	108	1,080
Mepilex Border Comfort	Enhanced foam dressing adhesive including adhesive border 10cm x 20cm (wcp 5cm x 15cm)	596800	10	5	50
Mepilex Border Comfort	Enhanced foam dressing adhesive including adhesive border 10cm x 30cm (wcp 5cm x 25cm)	596900	10	17	170
Mepilex Border Comfort Lite	Foam dressing silicone including adhesive border 4cm x 5cm lite dressing wcp 2cm x 3cm	582011	10	47	470
Mepilex Border Comfort Lite	Foam dressing silicone including adhesive border 5cm x 12.5cm lite dressing wcp 2.5cm x 8.5cm	582111	10	72	720
Mepilex Border Comfort Lite	Foam dressing silicone including adhesive border 7.5cm x 7.5cm lite dressing wcp 4.5cm x 4.5cm	582211	10	3472	34,720
Mepilex Border Comfort Lite	Foam dressing silicone including adhesive border 10cm x 10cm lite dressing wcp 6.5cm x 6.5cm	582311	10	1696	16,960

Supplier Name	Description	Product Code	Pack Size	Pack Qty Qty	1
Mepilex Border Comfort Lite	Foam dressing silicone including adhesive border 15cm x 15cm lite dressing wcp 11cm x 11cm	582511	10	37	370
Mepilex Border Flex	Foam dressing silicone including adhesive border 15cm x 19cm 5-layer oval y-cut	583400	5	8	40
Mepilex Border Post-op	Foam dressing silicone including adhesive border 6cm x 8cm with absorbent (wcp 3cm x 5cm) for moderate to high exudation	ng 496100	10	191	1,910
Mepilex Border Post-op	Foam dressing silicone including adhesive border 6cm x 8cm with absorbent (wcp 3cm x 5cm) for moderate to high exudation	ng 496100-01	10	38	380
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 9cm x 10cm with absorbent (wcp 5cm x 6cm) for moderate to	hi{ 496200	10	348	3,480
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 9cm x 10cm with absorbent (wcp 5cm x 6cm) for moderate to	hiչ 496200-01	10	110	1,100
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 10cm x 15cm with absorbent (wcp 5cm x 10cm) for moderate	to 496300	10	720	7,200
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 10cm x 15cm with absorbent (wcp 5cm x 10cm) for moderate	to 496300-01	10	164	1,640
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 10cm x 20cm with absorbent (wcp 4.5cm x 14.5cm) for moder	at 496400	10	403	4,030
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 10cm x 20cm with absorbent (wcp 4.5cm x 14.5cm) for moder	at 496400-01	10	81	810
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 10cm x 25cm with absorbent (wcp 4.5cm x 19.5cm) for moder	at 496450	10	370	3,700
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 10cm x 25cm with absorbent (wcp 4.5cm x 19.5cm) for moder	at: 496450-01	10	116	1,160
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 10cm x 30cm with absorbent (wcp 4.5cm x 24cm) for moderate	e 1 496600	10	201	2,010
Mepilex Border Post-op	Enhanced foam dressing adhesive including adhesive border 10cm x 30cm with absorbent (wcp 4.5cm x 24cm) for moderate	e 1496600-01	10	36	360
Mepilex Border Post-op	Foam dressing silicone including adhesive border 10cm x 35cm with absorbent (wcp 4.5cm x 29cm) for moderate to high ex	uc 496650	50	5	250
Mepilex Border Sacrum	Foam sacral dressing silicone including adhesive border 16cm x 20cm (wcp 11cm x 15cm)	282010	10	16	160
Mepilex Lite	Foam dressing silicone non bordered 6cm x 8.5cm lite dressing	284000	5	14	70
Mepilex Lite	Foam dressing silicone non bordered 10cm x 10cm	284100	5	8	40
Mepilex Transfer	Wound contact layer silicone dressing one sided 10cm x 12cm	294700	5	36	180
Mepilex XT	Foam dressing silicone non bordered 10cm x 11cm	211160	5	4	20
Mepilex XT	Foam dressing silicone non bordered 11cm x 20cm	211260	5	1	5
Mepitel	Wound contact layer silicone dressing two sided 5cm x 7cm	290500	5	195	975
Mepitel	Wound contact layer silicone dressing two sided 8cm x 10cm	290700	5	70	350
Mepitel	Wound contact layer silicone dressing two sided 12cm x 15cm	291000	5	46	230
Mepitel	Wound contact layer silicone dressing two sided 20cm x 32cm	292030	5	11	55
Mepitel Film	Scar management dressing 10.5cm x 12cm silicone film	296500	70	2	140
Mepitel One	Wound contact layer silicone dressing one sided 6cm x 7cm	289170-01	5	2356	11,780
Mepitel One	Wound contact layer silicone dressing one sided 9cm x 10cm	289270-01	5	1152	5,760
Mepitel One	Wound contact layer silicone dressing one sided 13cm x 15cm	289470-01	5	199	995
Mepitel One	Wound contact layer silicone dressing one sided 24cm x 27.5cm	289670-01	5	1	5
Mepore	Dressing adhesive island non woven fabric sterile 6cm x 7cm (wcp 3cm x 4cm)	670800	60	732	43,920
Mepore	Dressing adhesive island non woven fabric sterile 9cm x 10cm (wcp 4.5cm x 6cm)	670900	50	225	11,250
Mepore	Dressing adhesive island non woven fabric sterile 9cm x 15cm (wcp 4.5cm x 10cm)	671000-17	50	98	4,900
Mepore	Dressing adhesive island non woven fabric sterile 9cm x 25cm (wcp 4.5cm x 20cm)	671200-18	30	71	2,130
Mepore	Dressing adhesive island non woven fabric sterile 9cm x 35cm (wcp 4.5cm 25cm)	671400	30	2	60
Mepore Film	Dressing vapour-permeable adhesive film sterile 20cm x 30cm	273500	5	11	55
Mepore Film & Pad	Dressing vapour-permeable adhesive film with absorbent pad sterile 4cm x 5cm (wcp 1.5cm x 2.5cm)	275100	85	18	1,530
Mepore Film & Pad	Dressing vapour-permeable adhesive film with absorbent pad sterile 9cm x 30cm (wcp 4.5cm x 25cm)	275800	125	2	250
Mepore Ultra	Dressing Adhesive Island Non Woven Fabric Semi Permeable Backing Sterile 7cm x 8cm (wcp 4cm x 5cm)	680825-30	60	3	180
Mepore Ultra	Dressing Adhesive Island Non Woven Fabric Semi Permeable Backing Sterile 10cm x 11cm (wcp 6cm x 6cm)	680925	36	46	1,656
Mepore Ultra	Dressing Adhesive Island Non Woven Fabric Semi Permeable Backing Sterile 11cm x 15cm (wcp 6cm x 10cm)	681025	36	1	36
Metalline VC	Wound contact layer knitted viscose dressing Single sided non adhesive aluminised wound pad 8cmx9cm tracheo sterile	214-5985	50	24	1,200

Supplier Name	Description	Product Code	Pack Size	Pack Qty Qty	
OPER FILM PROTECT CHG	Dressing IV vapour-permeable adhesive film sterile 8.5cm x 11.5cm chlorhexidine gluconate IV securement dressing	0034002	25	7	175
OPSITE FLEXIGRID	Dressing vapour-permeable adhesive film sterile 6cm x 7cm NON RETURNABLE	4628	100	8	800
OPSITE FLEXIGRID	Dressing vapour-permeable adhesive film sterile 10cm X 12cm	4629	10	59	590
OPSITE FLEXIGRID	Dressing vapour-permeable adhesive film sterile 10cm X 12cm	4630	50	131	6,550
OPSITE FLEXIGRID	Dressing vapour-permeable adhesive film sterile 12cm X 25cm	4632	20	51	1,020
OpSite Post Op Visible	Dressing vapour permeable adhesive film with absorbent pad visible sterile 8cm x 10cm (wcp 3.6cm x 5cm)	66800136	20	3	60
OpSite Post Op Visible	Dressing vapour permeable adhesive film with absorbent pad visible sterile 10cm x 15cm (wcp 5.8cm x 10.2cm)	66800137	20	36	720
Opsite Spray	Dressing Vapour - Permable waterproof aerosol spray - Non Sterile 100ml	66004978	1	146	140
Opsite Spray	Dressing Vapour - Permable waterproof aerosol spray - Non Sterile 240ml	66004980	1	9	9
Pharmapad	Wound contact layer knitted viscose dressing 10cm x 10cm	PAD100100	50	40	2,000
Phatrmatull	Wound contact layer paraffin dressing 10cm x 7.5cm	TULL75100	10	1	10
PolyMem Tube	Polymeric membrane dressing with surfactant 7cm x 7cm pre cut tube	5333	30	1	30
Premier	Dressing pad absorbent non sterile 10cm x 12cm	1158	100	5	50
Premier Polyfield	Pack sterile dressing aid with powder free latex gloves 1 x pair small size examination gloves cuffed 1 x sterile sheet water rep	€6010PF	50	1	5
Premier Polyfield	Pack sterile dressing aid with powder free latex gloves 1 x pair medium size examination gloves cuffed 1 x sterile sheet water	16011PF	50	5	25
Premier Polyfield	Pack sterile dressing aid latex glove community 1 x pair medium size examination gloves cuffed 1 x sterile sheet water repelle	r 6021PF	50	1	5
Richardson Healthcare	Dressing towel 2 ply sterile 43 x 50cm single wrap	958007	50	4	20
Rocialle	Dressing vapour-permeable adhesive film with absorbent pad sterile 5cm x 7cm (wcp 2.5cm x 4cm)	537690ZD	50	192	9,60
Rocialle	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 10cm (wcp 5cm x 5cm)	537691ZD	50	15	75
Rocialle	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 15cm (wcp 5cm x 10cm)	537692ZD	50	8	40
Rocialle	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 30cm (wcp 5cm x 25cm)	537694ZD	50	2	10
Rocialle	Dressing vapour-permeable adhesive film sterile 8cm x 10cm	537696ZD	50	1	5
Rocialle	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 20cm (wcp 4cm x 15cm)	537713ZD	40	1	4
Roeko	Haemostatic dressing Gelatamp haemostatic sponge	NJG000	50	1	5
Silflex	Wound contact layer silicone dressing two sided Soft silicone wound contact layer 5cm x 7cm	CR3922	10	113	1,13
Silflex	Wound contact layer silicone dressing two sided Soft silicone wound contact layer 8cm x 10cm	CR3923	10	2	2
Silflex	Wound contact layer silicone dressing two sided Soft silicone wound contact layer 12cm x 15cm	CR3924	10	1	1
Silotull	Wound contact layer silicone dressing two sided 5cm x 7.5cm soft silicone primary wound dressing	SILO5075	30	1	3
Softpore	Dressing Adhesive Island Non Woven Fabric Semi Permeable Backing Sterile 6cm x 7cm (wcp 3cm x 4cm)	803067	60	4	24
Softpore	Dressing Adhesive Island Non Woven Fabric Semi Permeable Backing Sterile 10cm x 20cm (wcp 5cm x 15cm)	803120	30	6	18
Solvaline N	Wound contact layer knitted viscose dressing Double sided non adherent dressing 10cmx10cm	280005	100	36	3,60
Solvaline N VC	Wound contact layer knitted viscose dressing Double sided non adherent dressing 5cmx5cm sterile	280004	100	1	10
Suprasorb P Sensitive Border L	ite Foam dressing silicone including adhesive border Lite 10cm x 20cm (wcp 5cm x 15cm)	139088	10	1	1
Геgaderm	Dressing vapour-permeable adhesive film sterile 4.4cm x 4.4cm	1622W	100	26	2,60
Геgaderm	Dressing vapour-permeable adhesive film sterile 6cm x 7cm	1624W	100	79	7,90
Гegaderm	Dressing vapour-permeable adhesive film sterile 10cm X 12cm	1626W	50	130	6,50
Геgaderm	Dressing vapour-permeable adhesive film sterile 10cm x 25cm	1627	20	10	20
Гegaderm	Dressing vapour-permeable adhesive film sterile 20cm x 30cm	1629	10	7	7
Tegaderm	Dressing IV vapour-permeable adhesive film sterile 8.5cm x 11.5cm chg dressing (chlorhexidine gluconate i.v securement dre		25	336	8,40
Tegaderm	Dressing IV vapour-permeable adhesive film sterile 10cm x 15.5cm chg dressing (chlorhexidine gluconate I.V securement dre		25	52	1,30
Геgaderm	Dressing IV vapour-permeable adhesive film sterile 7cm x 8.5cm chg dressing (chlorhexidine gluconate i.v securement dressi		25	3	7!
Tegaderm	Dressing IV vapour-permeable adhesive film sterile 10cm x 12cm	1686	50	5	250

Supplier Name	Description	Product Code	Pack Size	Pack Qty Qty	
Tegaderm Foam	Foam tracheostomy dressing 8.8cm x 8.8cm fenestrated	90604	10	42	420
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile 5cm x 5.7cm paediatric with securing tapes	1610	100	24	2,400
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile 6cm x 7cm ported cannula	1623W	100	4	400
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile 7cm x 8.5cm peripheral line for cannula	1633	100	9	900
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile 8.5cm x 10.5cm with securing tape for central venous catheters	1635	50	14	700
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile Peripheral I.V Advanced Securement Dressing 7cm x 8cm	1681	100	4	400
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile Peripheral I.V Advanced Securement Dressing 7cm x 8cm	1681R	100	1	100
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile Central line I.V Advanced Securement Dressing 8.5cm x 11.5cm	1685	50	5	250
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile Central line I.V Advanced Securement Dressing 8.5cm x 11.5cm	1685R	50	3	150
Tegaderm IV	Dressing IV vapour-permeable adhesive film sterile 10cm x 15.5cm PICC line dressing	1689	25	11	275
Unisurge	Pack procedure gastro dressing Please contact NHSSC for more detail	F810661	50	1	50
Urgosorb Pad	Alginate standard dressing 5cm x 5cm	501673	10	25	250
UrgoSTART Contact	Wound contact layer interactive polymer dressing Impregnated with NOSF 10x10cm	550278	10	5	50
Yibon	Dressing vapour-permeable adhesive film with absorbent pad sterile 5cm x 7cm (wcp 2.5cm x 4cm)	6254701	50	21	1,050
Yibon	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 12cm (wcp 5cm x 6cm)	6254704	50	6	300
Yibon	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 15cm (wcp 5cm x 10cm)	6254705	50	4	200
Yibon	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 20cm (wcp 5cm x 15cm)	6254706	50	3	150
Yibon	Dressing vapour-permeable adhesive film with absorbent pad sterile 10cm x 30cm (wcp 5cm x 25cm)	6254708	50	1	50

#### Requesters List

Brand	Product code	Description	Pack Size	Pack Qty	Qty	
Kerramax care	PRD500-050-B50	Non-backed non-adhesive super absorbent dressing Sterile 10cm x 10cm	5	0	1	50
Kerramax care	PRD500-240-B30	Non-backed non-adhesive super absorbent dressing Sterile 20cm x 22cm	3	80	1	30
Zetuvit Plus Silicone	413830	Backed non-adhesive super absorbent dressing sterile 10x20cm silicone	$\epsilon$	0	1	60
Kerramax care	PRD500-120-B50	Non-backed non-adhesive super absorbent dressing Sterile 10cm x 22cm	5	0	2	100
Kliniderm superabsorbent	40511705	Backed non-adhesive super absorbent dressing sterile 20cm x 40cm	1	.0	2	20
Premierpad	2006N	Dressing pad absorbent sterile 20cm x 20cm	2	!5	2	50
RespoSorb Silicone Border	413009	Adhesive super absorbent dressing Sterile 12cm x 23cm Oval	1	.0	2	20
Zetuvit Plus Superabsorber	413032	Backed non-adhesive super absorbent dressing sterile 15cm x 20cm	1	.0	2	20
Kerramax care	PRD500-600-B10	Non-adhesive super absorbent dressing Sterile 20cm x 50cm	1	.0	3	30
Kerramax care	PRD500-380-B10	Non-backed non-adhesive super absorbent dressing Sterile 20X30CM (10 DRESSINGS) NON RETURNABLE	1	.0	3	30
Xupad	205112	Dressing pad absorbent non sterile 10cm x 12cm	10	0	6	600
Zetuvit Plus Silicone Border	413910	Adhesive super absorbent dressing Sterile 10 x 10cm	1	.0	8	80
Kerramax care	PRD500-120	Non-backed non-adhesive super absorbent dressing Sterile 10cm x 22cm	1	.0	33	330
Kerramax care	PRD500-050	Non-backed non-adhesive super absorbent dressing Sterile 10cm x 10cm	1	.0	37	370
Xupad	205012	Dressing pad absorbent sterile 10cm x 12cm	2	!5	38	950
Xupad	205030	Dressing pad absorbent sterile 20cm x 20cm	1	.5	38	570
RespoSorb Silicone Border	413001	Adhesive super absorbent dressing Sterile 10 x 10cm	1	.0	40	400
Kerramax care	PRD500-240	Non-backed non-adhesive super absorbent dressing Sterile 20cm x 22cm	1	.0	46	460
Xupad	205020	Dressing pad absorbent sterile 10cm x 20cm	2	!5	63	1575
Xupad	205040	Dressing pad absorbent sterile 20cm x 40cm		8 1	.66	1328
Zetuvit Plus Superabsorber	413030	Backed non-adhesive super absorbent dressing sterile 10cm x 10cm	1	.0 6	81	6810
Zetuvit Plus Superabsorber	413031	Backed non-adhesive super absorbent dressing sterile 10cm x 20cm	1	.0 9	26	9260
Zetuvit Plus Superabsorber	413034	Non-adhesive super absorbent dressing Sterile 20cm x 40cm	1	.0 9	60	9600

### Q4 - Systems Summary

MPC	Description	UOI	Brand	Pack Qty
66802042	Negative Pressure Wound Therapy Foam Dressing Kit 10cm x 20cm	Kit 1	PICO 14	25
66802043	Negative Pressure Wound Therapy Foam Dressing Kit 10cm x 30cm	Kit 1	PICO 14	109
66802012	Negative Pressure Wound Therapy Disposable System 10cm x 20cm - 1 dressing kit	Each 1	PICO 7	136
66802013	Negative Pressure Wound Therapy Disposable System 10cm x 30cm - 1 dressing kit	Each 1	PICO 7	249
66802015	Negative Pressure Wound Therapy Disposable System 15cm x 15cm - 1 dressing kit	Each 1	PICO 7	1
66802014	Negative Pressure Wound Therapy Disposable System 10cm x 40cm - 1 dressing kit	Each 1	PICO 7	251
66802017	Negative Pressure Wound Therapy Disposable System 15cm x 30cm - 1 dressing kit	Each 1	PICO 7	7
66802018	Negative Pressure Wound Therapy Disposable System 20cm x 20cm - 1 dressing kit	Each 1	PICO 7	1
66802002	Negative Pressure Wound Therapy Disposable System 10cm x 20cm - 2 dressing kit	Each 1	PICO 7	57
66802003	Negative Pressure Wound Therapy Disposable System 10cm x 30cm - 2 dressing kit	Each 1	PICO 7	32
66802005	Negative Pressure Wound Therapy Disposable System 15cm x 15cm - 2 dressing kit	Each 1	PICO 7	2
66802004	Negative Pressure Wound Therapy Disposable System 10cm x 40cm - 2 dressing kit	Each 1	PICO 7	8
66802008	Negative Pressure Wound Therapy Disposable System 20cm x 20cm - 2 dressing kit	Each 1	PICO 7	1
66802000	Negative Pressure Wound Therapy Disposable System 15cm x 20cm multisite small - 2 dressing kit	Each 1	PICO 7	1
66802001	Negative Pressure Wound Therapy Disposable System 20cm x 25cm multisite large - 2 dressing kit	Each 1	PICO 7	1
66802022	Negative Pressure Wound Therapy Foam Dressing Kit 10cm x 20cm dressing	Pack 5	PICO 7	2
VAC-6000ME	Vacuum assisted device Without traction force indicator	Pack 5	Kiwi	95

#### Q4 - Consumables Summary

Product Code	Description	UOI	Brand	Pack Qty
M6275009/10	Negative Pressure Wound Therapy Accessories Occlusive drape 30.5cm x 26cm	Case 10	VAC Therapy	35
M6275026/10	Negative Pressure Wound Therapy Accessories Gel patches 14cm x 3cm	Case 10	VAC Therapy	6
M6275066/10	Negative Pressure Wound Therapy Accessories Y connector	Case 10	VAC Therapy	7
M8275096/5	Negative Pressure Wound Therapy Foam Dressing Kit Granufoam silver medium kit 18cm x 12.5cm x 3.3cm	Each 1	VAC Therapy	30
M8275099/5	Negative Pressure Wound Therapy Foam Dressing Kit Granufoam silver large kit 26cm x 15cm x 3.3cm	Each 1	VAC Therapy	30
M8275057/10	Negative Pressure Wound Therapy Accessories Sensatrac pad only	Each 1	VAC Therapy	91
M8275051/10	Negative Pressure Wound Therapy Foam Dressing Kit Granufoam small 10cm x 7.5cm x 3.3cm	Each 1	VAC Therapy	151
M8275052/10	Negative Pressure Wound Therapy Foam Dressing Kit Granufoam medium 18cm x 12.5cm x 3.3cm	Each 1	VAC Therapy	246
M8275053/10	Negative Pressure Wound Therapy Foam Dressing Kit Granufoam large 26cm x 15cm x 3.3cm	Each 1	VAC Therapy	210
M8275058/10.S	Negative Pressure Wound Therapy Canister 300ml actiVAC canister	Each 1	VAC Therapy	530
M8275063/10.S	Negative Pressure Wound Therapy Canister 500ml infoVAC/ULTA canister	Each 1	VAC Therapy	100
M8275042/10	Negative Pressure Wound Therapy Foam Dressing Kit Granufoam bridge dressing	Each 1	VAC Therapy	145
66800795	Negative Pressure Wound Therapy Foam Dressing Kit Medium hydrophobic foam	Each 1	Renasys	7
66800934	Negative Pressure Wound Therapy Gauze Dressing Kit Medium	Each 1	Renasys	7
66801273	Negative Pressure Wound Therapy Canister 300ml	Each 1	Renasys Touch	4
416030.S	Negative Pressure Wound Therapy Accessories ActiVAC carry bag	Each 1	VAC Therapy	20
66802023	Negative Pressure Wound Therapy Foam Dressing 10cm x 30cm dressing	Pack 5	PICO 7	3