Trust Policy	Worcestershire Acute Hospitals NHS Trust

Wound Assessment and Management Guideline

Department / Service:	Tissue Viability
Originator:	Claire Hughes – Acting Tissue Viability lead
Accountable Director:	Chief Nurse
Approved by:	Clinical Governance Group
Date of approval:	4th May 2021
Review date: **This is the most current document and should be used until a revised version is available**	1st May 2025
Target Organisation(s)	Worcestershire Acute Hospitals NHS Trust
Target Departments	
Target staff categories	Worcestershire Acute Hospital Trust (WAHT) Staff who are involved in wound assessment and management.

Policy Overview:
This guideline is to ensure safe practice and maintain core standards of evidence based practice in Wound Management.

Key amendments to this document

Date	Amendment	Approved By:
27/04/2017	Wound assessment Chart added to guideline	
August 2017	Document extended for 6 months as per TMC paper	TMC
December 2017	Sentence added in at the request of the Coroner	
December 2017	Document extended for 3 months as per TLG recommendation	TLG
March 2018	Document extended for 3 months as approved by TLG	TLG
June 2018	Document extended for 3 months as per TLG recommendation	TLG
April 2019	Document extended for 6 month whilst review process is completed	Lisa Hill
March 2020	Document extended for 3 months whilst review is completed.	Lisa Hill
June 2020	Document extended for 6 months during COVID period	
January 2021	Policy Reviewed	Lisa Hill
February 2021	Document extended as per Trust agreement 11.02.2021	
May 2021	Document approved for 3 years	CGG
January 25	Document extended for 3 months	Claire Hughes/Alison Robinson

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Appendices

Appendix 1 to 10.

Supporting Documents

Supporting Document 1	Equality Impact Assessment
Supporting Document 2	Financial Risk Assessment

1. Introduction & Scope of this document

This policy has been developed to enable nursing staff to manage wounds and select appropriate dressings according to best recognised practice. Wounds are an expensive and growing problem: today over 2,000 wound management products are available on the market. In addition, all members of the healthcare team can be involved in wound care in a variety of settings, with patients often moving between professionals and environments. This policy will help ensure best practice and minimise the potential for inconsistency of care locally.

Purpose

The aim is to provide consistent individualised high quality care in wound management for all patients/clients of Worcestershire Acute Hospitals NHS Trust by providing:

• A standardised and holistic approach to wound care, whilst taking into account individuals preferences and beliefs

• Effective wound management which is delivered by staff with the appropriate knowledge and skills

• symptom control and management when wound healing is not the primary objective i.e. for palliative patients

• Clinically effective wound management dressings which are available and utilised for optimum wound healing, patient comfort and cost effectiveness

1.2. The policy applies to: This policy applies to all employed clinical staff, qualified and unqualified, bank and agency staff required to work in clinical areas. This includes but is not limited to medical staff, nurses, midwives and allied healthcare professional (AHP) and health care assistants (HCA).

1.3. Implementation of this policy will ensure that:

- Patients receive safe and effective wound care in line with relevant national guidance
- Staff have access to support and resources to support them with managing patients' wounds

2. Definitions

Surgical Wounds
Surgical wounds healing by first intention have sutures or clips or staples drawing the edges of the wound together, aiming to promote primary wound closure. Liaise with the surgical team to ensure the aim and methods of treatment are co-ordinated e.g. time span for post- operative dressing removal and method for sutures, clip or staple removal.

If patient requests a dressing cover for aesthetic reasons or to stop irritation from clothing, a vapour-permeable film or island dressing can be used.

Trauma Wounds
A trauma wound is a severe break or injury in the soft tissue of the skin. Trauma wounds may include abrasions, lacerations, crush wounds, penetration and puncture wounds. Trauma wounds can be injuries resulting from accidents or acts of violence and can worsen and become infected quickly if not treated appropriately.

Consider the wound history and presence of foreign bodies e.g. trauma wounds maybe contaminated and may require tetanus injection. Consider the position of the wound e.g. wounds over a joint maybe susceptible to stretching, wounds near/in axilla, groin and anus may be susceptible to infection due to warm, moist environment.

For skin tears guidance. (Appendix 4)

4.9. Thermal Wounds
Burns and scalds require initial treatment to cool; for deep/extensive burns
follow the advice provided by the The Midlands Critical Care & Trauma Network. https://www.mcctn.org.uk/

4.10 Chronic Wounds
A chronic wound is a wound that does not heal in an orderly set of stages and in a predictable amount of time; wounds that do not heal within three months are often considered chronic.
Chronic wounds seem to be delayed in one or more of the phases of wound healing.

4.11. Lower Leg wound
Lower leg wounds presentations are due to a number of underlying pathologies, including venous disease, arterial disease, rheumatoid arthritis and complication of diabetes etc.

Accurate diagnosis of the underlying cause is an essential part of management;

- Holistic assessment of the patient
- Differential diagnosis of Ankle Brachial Pressure Index (APBi) with Doppler ultra sound
- Diagnosis of diabetes or any other co-morbidities that are influential on the normal wound healing cascade(Appendix 5)

4.12. Malignant/ Fungating Wounds
A fungating wound is a cancerous lesion, either primary or metastatic, that infiltrates the skin and its blood and lymphatic vessels. The priorities of care are to ensure the patient has been reviewed by

an oncology team, therefore options for any form of curative treatment have been exhausted and symptom control, based on the patient's needs have been addressed.

Consider "POSIE'S" assessment
P = Pain
O= Odour
S = Skin
I = Infection
E = Exudate and Bleeding
S = Self

In conjunction with Palliative care - malignant skin ulcer https://cks.nice.org.uk/topics/palliative-care-malignant-skin-ulcer/

Closed wounds (primary intention)

2.1. These are wounds with edges approximated by stitches, staples, glue or other Tissue adhesive such as wound closure strips.

Open wounds (Secondary Intention)

2.2. Those wounds left to heal by the process of granulation tissue formation and epithelialisation, sometimes referred to as healing by secondary intention. Examples of these wounds include leg ulcers, pressure ulcers and traumatic injuries such as pre-tibial flaps. Some surgical wounds may also be left open to heal and some surgical wounds which breakdown (dehisce) post operatively are left to heal by secondary intention.

Malignant / Fungating Wounds

2.3. Are malignancies which cause exuberant skin infiltration? It is possible to palliate the symptoms of these wounds but in most circumstances not to heal them.

Moist Wound Healing

2.4. Is an underpinning principle of evidence based wound management. In the majority of circumstances wounds that require active intervention to facilitate healing should be kept moist. Excessively wet or dry wounds delay wound healing.

Wound Bed Preparation

2.5. Is a concept which combines a number of wound management processes. It is devised as an algorithm which is applicable to all wound types to enable a systematic approach to wound healing. It incorporates the principles of moist wound healing.

T.I.M.E.S: Tissue, Infection, Moisture, Edge, Surrounding Skin.

2.6. This is a development of the wound bed preparation concept and is designed to enable systematic assessment of open wounds. (Appendix 9)

3. Responsibility and Duties

All staff responsibilities
• To recognise and acknowledge their personal accountability to maintain and improve their knowledge and assist others both qualified and unqualified within the care team to develop professional competence by: - Adhering to the policy - Identifying and seeking training to address any personal competency, knowledge and skills issues. - To record all wound care activity according to the Quality Standards for Health Record-Keeping Policy. To acknowledge personal accountability to use the Trusts' Wound Care Formulary and in exceptional cases provide sound rationale for any deviation.

3.1. Role of Chief Nurse: The Chief Nurse is responsible for:

Overall responsibility for ensuring that the Trust has in place clear processes for managing risks associated with the wound management
Ensure that appropriate arrangements are in place to enable safe and effective care and that employees are fully aware of their statutory, organisational and professional responsibilities and that these are fulfilled

3.2. The Tissue Viability Service is responsible for:

Be an expert resource and exemplary role model in relation to wound care
- Provide expert clinical advice, education and support to clinical staff and the multidisciplinary team
- Monitor wound care standards and support teams to achieve them
- Maintain a supportive tissue viability link nurse network
- Liaise with medical and surgical teams when interventions are required

Ensuring that this policy is reviewed regularly in line with Evidence base and current national guidelines
Maintaining confidential storage of patient documentation in line with WHAT NHS Trust Policies

3.3. Role of Registered Nurses and Midwives and pre-registration students

Identifying patients with a wound undertaking and documenting holistic assessments
Liaising with the patient and the multidisciplinary team to formulate strategies and interventions to manage/ treat wounds.
• Ensuring that multidisciplinary patient focussed care plans are in place and interventions are recorded, dated and signed in line with the Quality Standards for Health Record-Keeping Policy.
• Liaising with the patient, their relatives or carers and health and social care professionals regarding treatment/management strategies.
• Ensuring that they maintain their knowledge and competence in caring for patients with wounds.
• Seeking the advice of the Tissue Viability Team where appropriate whilst maintaining the ongoing responsibility for the patient's episode of care.

3.4. Role of pre-registration students – nursing and AHP

- Can undertake as above once assessed as competent by a competent registered professional.

3.5. Role of Medical Staff

Review and assess patient's wounds as part of their holistic assessment
- Ensure that their teams are aware of this policy and provide collaborative multidisciplinary working to ensure the policy is adhered to
- Perform surgical procedures and expert medical intervention as required to promote appropriate wound management.
- Medical teams to liaise directly with the TVT for urgent/complex wound management

3.6. Role of Allied Health Professionals

It is the responsibility of Allied Health Professionals to:

- Work with nursing and medical colleagues to ensure appropriate care plans are in place for the management of patients with open wounds.
- Have an awareness of patients open wounds where they exist and the impact this may have on therapy goals.

3.7. Role of Unregistered Staff

It is the responsibility of unregistered staff to:

- Performing delegated tasks from registered nursing colleagues
- Delivery of care as specified in the patients' care plans
- Escalating any deterioration or other concerns to registered nurse in a timely manner.
- Documenting any variance from care plans and any deterioration in condition in the patient's case notes.

4. Policy

Holistic assessment

Best practice is that the holistic assessment should occur on first presentation of the wound. In the in-patient area in most circumstances within six hours of admission, however if the admission is directly related to issues with the wound, assessment should be performed sooner as part of the admission procedure and involve medical staff and if necessary the wider multi-disciplinary team.
The timing of a scheduled holistic wound reassessment will depend on the condition of the patient, the condition of the wound and care setting.

Holistic wound reassessment should be carried out:

"Clinicians must respond rapidly if a patient with a wound demonstrates signs of potentially fatal infection, including a systemic inflammatory response, sepsis, extensive tissue necrosis, gas gangrene or necrotizing fasciitis"

- if the condition of the wound deteriorates

- at the time scheduled for holistic wound reassessment - as a minimum every 2 weeks
- In inpatient settings – as a minimum every 2 weeks and prior to discharge. (If the wound is the primary cause for admission, more frequent reassessment will be necessary).

Aseptic Non Touch Technique (ANTT) is the chosen method by this trust for staff to adopt when performing an aseptic procedure .This technique if performed correctly will prevent infection of wounds. (See WHAT SSI Bundle)
ANTT is divided into 2 different processes: ANTT and Surgical ANTT (Pratt et al 2007)

Health and Social Care Act (Doha 2008) stipulates that:

- ANTT should be carried out in a manner that maintains and promotes the principles of asepsis.
- The technique should be sustained across the organisation.
- All staff undertaking procedures involving asepsis should be provided with education, training and assessment.

4.1. **Generic wound assessment minimal data set (Coleman et.al 2017): Domain Core data set items**

By identifying factors that require intervention and indicating objectives for management holistic assessment will guide appropriate patient and wound management.

- General health information Risk factors for delaying healing (systematic and local blood supply to the wound, susceptibility to infection, medication affecting wound healing, skin integrity)
- Allergies
- Skin sensitivities
- Impact of the wound on the quality of life (physical, social and emotional)

Wound baseline information

- Number of wounds
- Wound location
- Wound type/classification
- Wound duration
- Treatment aim
- Planned reassessment date

Wound assessment parameters

- Wound size (maximum length, width, depth)
- Undermining / tunnelling
- Category (pressure ulcers only)
- Wound bed tissue type
- Wound bed tissue amount (%)
- Description of wound margins/edges
- Colour and condition of the surrounding skin
- Whether the wound as healed

Wound symptoms

- Presence of wound pain

- Wound pain frequency
- Wound pain severity
- Exudate amount
- Exudate consistency/type/colour
- Signs of systemic infection Whether a wound swab has been taken

Specialist Intervention

- Investigation for lower limb wounds (Ankle Brachial Pressure Index APBI)
- Referrals Tissue Viability, Podiatrist, Vascular, Dermatology and Plastic teams

Additional assessment parameters may be necessary according to wound type e.g. for signs and symptoms of peripheral neuropathy in a patient with a diabetic foot ulcer.

4.2. Wound assessment with TIMES

The concept of TIMES: a framework offering a logical and systematic approach to the assessment and delivery of wound care.

The key components of wound assessment, namely;

- T - tissue non-viable or deficient
- I - infection or inflammation
- M - moisture imbalance
- E - edge non-advancing or undermining
- S - surrounding skin

T - Tissue

Description of tissue types found in the wound area should include details relating to;

- the wound margins and edges
- the wound bed

Tissue type present in the wound bed is key to determining treatment aims and method. It is important to note that more than one tissue type may be present at the same time. Chronic wounds can accumulate necrotic tissue and slough within the wound bed and margins. The appearance and depth of necrotic tissue and slough can vary, as can the moisture. As healing progresses, the quantity of necrotic and slough tissue will reduce, as granulation tissue increase. Healing can only occur when the wound bed is covered with healthy granulation tissue. Therefore the aim of management should be to remove devitalised and dead tissue from the wound bed, while protecting and maintaining moisture balance to encourage granulation.

At each wound assessment the percentage of tissue type presenting within the wound should be recorded and compared with previous assessment findings to mark progress e.g. 80% slough 20% granulating tissue.

There are several factors that will influence the depth and appearance of the wound bed and these need consideration during the assessment process. For example the structure and function of skin varies: the skin of legs and trunk is thinner and differs from that on the soles of the feet where it is thicker and lacks hair follicles. Age, comorbidities and medication, such are steroids, can affect the skin, changing its appearance, thickness and susceptibility to damage and ability to heal.

The anatomical location and depth of a wound will also define what structures are likely to be encountered at the base of a wound. For example, tendons are close to the surface over the dorsum of the foot and bone is in close proximity to the skin surface on the elbows, knees, heels where there is little or no subcutaneous tissue. There should also be a note of surgical intervention where implanted materials or sutures may be present in the wound.

Necrotic tissue can act as a potential source of wound and systemic infection therefore there is an emphasis on removal of necrotic tissue and slough. As wounds progress, an increasing proportion of the wound bed should be covered in granulating tissue. Treatment aims at this stage are focused on maintaining moist wound environment and protecting developing granulation tissue and encouraging progressive epithelisation.

I - Infection or inflammation

Wound infection is a change within the wound that may delay healing, cause unpleasant symptoms for the patient and requires appropriate timely treatment and management. It is one of the most challenging and frequently reported complications of wound care. Wound infections occur when microorganisms start to increase in numbers and overwhelm the host's immune response. This response may be localised within the wound bed or systemic.

It is often misdiagnosed and treated inappropriately and as a consequence lead to delayed wound healing, increased treatment costs, and poor outcome for the patient due to uncontrolled symptoms, poor quality of life and in the worst case scenario may lead to sepsis and death. Certain factors may increase the patient's risk of developing wound
Infection;

Patient related factors;

- comorbidities; that may reduce oxygen perfusion (cardiovascular,
- respiratory, anaemia)
- metabolic disorders; that may impair immune response (diabetes)
- medication; which will reduce neutrophil activity and effect immune
- response (corticosteroids, cytotoxic therapy)
- chronic disease/comorbidities; obesity, cognitive impairment,
- respiratory/ liver/ kidney failure
- age; increasing age contributes to slower healing, while the very young
- have immature immune systems
- psychological factors; poor life style choices such as poor diet,
- smoking, alcoholism, substance misuse and poor hygiene
- unsuitable or poor living conditions
- Wound related factors;
- duration of the wound (>6 months)
- size of the wound (>10cm^2)
- anatomical site of the wound (wounds in highly contaminated areas
- such as anus)
- type of wound e.g. surgical wound that result from long or
- contaminated surgery
- wounds containing devitalised tissue

Clinical indicators for wound infection can be present in all types of wounds;

Acute wounds:

- erythema,
- oedema,
- pain,
- increase temperature
- Purulent exudate.

In chronic wounds the additional indicators;

- serous exudate with inflammation delayed healing
- friable granulation (bridging where strands of granulation tissue bleed
- easily)
- discoloured granulation
- pocketing at the wound bed (strips of granulation tissue that appear at the base of the wound, as opposed to uniform spread of granulation across the whole wound
- odour
- Wound breaking down/ delayed wound healing.

In the absence of overt wound infection, biofilm should be considered as the possible cause of delayed healing in all wound that are failing to progress adequately after more than 14 days of optimal management.

Inflammation is not always a result of infection. Underlying disorders such as untreated venous congestion or vasculitis can prompt an inflammatory response.

M - Moisture imbalance

Achieving moisture balance is essential for the maintenance of skin integrity and wound healing. During wound assessment there is a need to note the volume, colour, consistency and odour of exudate to guide wound treatment decisions.
A certain amount of wound fluid is necessary as it is full of substances needed for healing, such as electrolytes, growth factors, nutrients, protein digesting enzymes, inflammatory mediators and white blood cells. Exudate is a good indicator of the state of a wound. Changes in colour, amount, viscosity or smell can be a trigger to reassess the wound.

E – Edge

Examination of the edge of the wound can assist in the identification of the wound's origin. For example venous leg ulcers are shallow and generally irregular in shape, arterial ulcers are well defined.
The lack of new, healthy tissue at the wound edges, or presence of rolled edges, indicates wound healing is not progressing normally. Rolled and or raised edges should alert to the possibility of malignancy and referral to a specialist service for a biopsy of the affected tissue and analysis
.
In normal wound healing granulation tissue from the base of the wound and edges of deeper wounds and /or from islands of epithelial tissue that originates from intact skin appendages; hair follicles and sweat glands. Concurrent contraction of the wound edges minimises the size and depth of the defect, reducing wound volume and area.

S - Surrounding skin

The integrity of fragile skin around a wound can be impaired if the conditions of the wound are not managed appropriately; excess exudate can cause maceration, repeated dressing changes skin stripping.
In the presence of infection the surrounding skin may appear red, hot to touch; local oedema and the patient may be experiencing an increase in pain.

4.3. Wound Management Guidelines with TIMES

T – Tissue
Devitalised tissue (slough & necrosis) forms a physical barrier to healing it does not necessarily indicate presence of infection, but can create an ideal site for bacterial growth. Its presence can prolong the inflammatory phase of healing and prevent progression into the proliferative phase.
Healing wounds should progress through from black necrosis, to yellow slough to red granulation, to pink epithelialisation.

Autolytic debridement
This is the body's own method of debridement. During the inflammatory stage of healing white blood cells and proteolytic enzymes flood the wound to destroy and remove debris. If the underlying cause of the wound is well managed, autolysis is likely to progress easily and rapidly. Failure to treat the underlying cause is likely to simply result in more slough being produced. E.g. uncomplicated venous ulcers are likely to be sloughy due to the venous congestion.

Autolysis relies on a moist environment. If the wound is too wet or too dry, use an appropriate dressing to create a moist environment e.g. hydrogels and occlusive dressings to re-hydrate dry slough and necrosis; calcium alginates, hydro-fibres and semi-permeable dressings to absorb excess exudate in wetter wounds. The choice of secondary dressing may also effect the moist environment
E.g. film as the secondary dressing over hydrogel will achieve the maximum rehydration of the wound bed.

For more complex wounds, autolysis may prove too slow and an alternative method should be considered.

Involves the cutting away of dead tissue using a sterile technique, usually under local or general anaesthetic. It can help stimulate healing by converting a chronic wound back into an acute wound. It can cause trauma and pain. It must be carried out by a professional qualified in sharp.
Debridement and is often undertaken by Podiatrists.

WARNING: Do not attempt sharp or surgical debridement unless you have successfully completed the necessary course(s) and are qualified and competent in this skill.

Larval debridement
Involves the use of sterile larvae to remove slough and is available on prescription.

Wound Management Guidelines with TIMES

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Sharp / surgical debridement Again there is a table within the Royal Marsden Manual
Involves the cutting away of dead tissue using a sterile technique, usually under local or general anaesthetic. It can help stimulate healing by converting a chronic wound back into an acute wound. It can cause trauma and pain. It must be carried out by a professional qualified in sharp debridement and is often undertaken by Podiatrists.

WARNING: Do not attempt sharp or surgical debridement unless you have successfully completed the necessary course(s) and are qualified and competent in this skill.

Larval debridement
Involves the use of sterile larvae to remove slough and is available on prescription.
There is some evidence it stimulates healing and reduces bacterial burden. It is important to fully assess the wound to determine if it is safe to use larvae. The nature of this product may not be sensitive to patient's expectations, it is important to recognise that patients are need to be well informed and are provided with appropriate information literature. (Appendix 7)

Mechanical debridement
This involves the use of non-discriminatory physical force to remove necrotic tissue, and is not recommended. Traditionally wet-to-dry dressings were used, but this method can cause severe pain and trauma and should no longer be practiced. Other methods include ultrasonic therapy, pressure irrigation and whirlpool therapy. The use of debriding wound care products and monofilament debriding pad are widely available

I - Inflammation and infection control

Inflammation and infection control involves measures to minimise the risk of infection, to reduce bacterial burden and to treat any infection or excess inflammation.
NB: inflammatory conditions such as phlebitis, vasculitis and pyoderma gangrenosum, etc., do not respond to antibiotic therapy, but usually require anti-inflammatory therapy such as immunosuppressant's and systemic cortico steroids.

All wounds MUST be swabbed on admission for MRSA, as per infection control policy.

A wound swab should be taken only where there is suspected infection present. Swab results in isolation do not identify infection but in conjunction with clinical assessment, but the results will help to identify the organisms present and guide on most appropriate antibiotic therapy.

Use of topical anti-microbial solutions and dressings
Anti-microbial solutions and dressings should generally be reserved for situations where the wound presents with an acute infection or is heavily colonised, when intervention is required for the removal and reduction of biofilm.

M – Moisture Balance

Moist wound healing is generally thought to accelerate healing, particularly
Re-epithelialisation. However excess exudate is thought to be harmful to the wound bed and surrounding skin. The chemical imbalance of chronic wound fluid can cause destruction of growth factors, new granulation tissue and the surrounding skin.
Even acute wound fluid, which is chemically balanced to promote healing, may be harmful if left in contact with the wound bed over a long period of time – evidence suggests that chemicals become trapped within the tissue and set off a cascade of pathogenic abnormalities.
Wounds that are left to dry out completely may be slow to epithelialize and are more likely to scar.

Achieving a moist, but not wet, environment relies on;
- Matching the moisture level of the wound with the fluid handling properties of the dressing
- Identifying and treating the source of the wound exudate e.g. infection, or oedema.

*****WARNING: Do not attempt to re-hydrate or soften ischaemic or diabetic necrosis, as this may stimulate a wet gangrene. These wounds should be kept dry and any decision regarding debridement should be led by a Specialist practitioner. *****

E – Edge Advancement

Failure to achieve successful wound closure and re-establishment of an intact epithelium may be due to a number of factors including;
- cellular dysfunction (possibly as a result damage from prolonged contact with wound fluid)
- infection
- repeated trauma due to adhesion of dressing materials / poor dressing technique
- ischaemia
- desiccation
- failure to correctly manage the underlying cause of the wound (e.g. pressure, venous congestion)

Where more conservative management has failed, use of advanced therapies should also be considered. These include;

- Wound treatments such as protease inhibitors and/or collagen.
- Negative Pressure Wound therapy (NPWT), with canisters for wounds with heavy exudate.
- Single use Portable NPWT device: PICO™, SNAP™ single use and canister free, application to be undertaken only by a competent practitioner.
- Consider referral to specialist team's e.g. Vascular team, or Plastics team to give consideration to such procedures as skin grafts.

The general condition of the patient can interfere with wound healing therefore a need to assess and manage wider factors delaying healing. Patients who are immunocompromised due to illness or medication will heal slower. Risk of infection and progression through the inflammatory phase can be particularly problematic, and management should include close vigilance for signs of infection as well as efforts to optimise the patient's general health, for example through nutrition.

S – Surrounding Skin

Failure to assess and manage conditions affecting the peri-wound skin which can, in turn, affect the wound healing process. There is a need to address the cause of skin issue;

- Hyperkeratosis – occurs as a result of over-proliferation of keratin producing cells over the surface of the skin, which results in increased thickening of the epidermis and dermis. The affected area needs to be exfoliated to remove the dead tissue – this can be achieved safely and easily with a monofilament debridement pad or cloth.
- Dermatitis – this is an itchy epidermal and dermal inflammatory reaction of the skin and the cause needs to be identified to ensure appropriate treatment to resolve the issue.
- Cellulitis – is an acute, painful infection of the skin and subcutaneous tissue and requires immediate intervention with appropriate antibiotic therapy, pain relief and support to the tissues.
- Oedema – requires elevation and/or support of the tissue to assist in the reduction of the swelling cause by the fluid in the interstitial space.
- Maceration/excoriation – occurs when the dressing selected is unable to manage volume of exudate being produced and so overflowing onto the surrounding skin.

Wound cleansing

What is recommended to cleanse the wound?

The aim of wound cleansing is to remove gross contamination with minimal pain to the patient and minimal trauma to the tissue. Wounds should be cleaned to:-

- remove excess exudates
- remove slough and/or necrotic tissue
- remove remnants of previous dressings
- to facilitate accurate assessment of the wound/wound bed
- to promote patient comfort

Mechanical debridement

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4.4. Wound cleansing

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4.5. Wound Dressing Decision Guide -Products

The wound dressing product should be appropriate to meet the needs of the wound and /or promote the next stage of the wound-healing matrix, taking into account wound bed preparation principles of TIMES. (Appendix 8)

The wound dressing product should be used in accordance with the manufacturer's instructions. Give consideration to the biochemical reactions of combining interactive dressing. This information is available within the data sheet accompanying the product. Particular attention should be paid to indications, cautions, contra-indications and frequency of dressing change.

Ward /Dept. responsible to negotiating with their site materials management team to ensure sufficient stock levels and appropriate dressing selection for their area. Ensuring the "…Right Dressing, Right Wound, Right Time…"

4.6 Pain Assessment

In wound care, accurate assessment of pain is essential with regard to choice of the most appropriate dressing. Assessment of pain before, during and after the dressing change may provide the nurse with vital information for future wound management.

Exception - patients with peripheral neuropathy who may have lost sensation and therefore not able to feel pain e.g. diabetic patients may be unable to feel pain in the foot.

In general, pain experienced by patient although extremely subjective and variable from patient to patient may be considered as:

- Deep dull constant pain
- Superficial burning type pain
- Neuralgic type pain
- Ischaemic type pain

The patient's perception should be acknowledged and appropriate action taken to alleviate the pain. The wound dressing should be appropriate to the type, location and size of the wound.

The wound dressing product should be acceptable to the patient, comfortable, trauma free on removal and take into consideration such factors as odour and taking into account their culture and beliefs.

4.7. Surgical Wounds

Surgical wounds healing by first intention have sutures or clips or staples drawing the edges of the wound together, aiming to promote primary wound closure. Liaise with the surgical team to ensure

the aim and methods of treatment are co-ordinated e.g. time span for post- operative dressing removal and method for sutures, clip or staple removal.

If patient requests a dressing cover for aesthetic reasons or to stop irritation from clothing, a vapour-permeable film or island dressing can be used.

4.13 Essential nutrients for wound healing

Wound healing requires an adequate supply of macro and micronutrients as well as adequate hydration. Deficiencies can interfere with wound healing due to reduced tensile strength of new tissue, wound dehiscence, increased risk of infection and fragile scar tissue.

Protein, Vitamin C, B complex and A, Zinc, Iron and Copper are essential for wound healing. In addition to these nutrients, it is essential that adequate energy/calories are obtained from fats and carbohydrates to prevent tissue protein being used as a source of energy.
For patients presenting with poor nutritional status or with extensive/ multiple wounds referral to dietetic services.

Factors affecting delay wound healing

Table 1. Intrinsic and extrinsic factors affecting wound healing. [13,14]

Intrinsic Factors	Extrinsic Factors
Health Status	**Physical damage**
Good blood supply or oxygenation	Pressure
	Friction
	Shearing forces
	Debris
	Slough
Immune function	Necrotic tissue
Healthy immune function helps the wound healing process	Eschar
Reduces the risk of wound bed infection	Scab
	Dressing residue
	Sutures
Comorbidities	**Dessication**
Diabetes	Drying of the wound surface resulting in death of surface cells
Autoimmune disease	
Pain (increases the production of cortisol)	
Age-related changes to skin	**Maceration**
Loss of hair follicles, sebaceous glands, receptors	Excess exudate retards the healing process and damages the peri-skin
Reduced blood supply	Temperature
Increased fragility	Optimal temperature 37°C
Dryness	
Thinning	
	Infection
	Chemical stress may have an adverse effect on the wound and cells
Nutrition	Topic agents such as antiseptics
A balanced diet including proteins (particularly for the amino acid arginine), carbohydrates, fats and fluids promotes healing.	Smoking
	Drugs such as steroids and non-steroid anti-inflammatory drugs

Stacey, M. (2016)

4.14. Wound photography

Patients with wounds will have an initial and on-going assessment of their wound using the Trust recognised wound assessment tool. This assessment should be supported by digital photography.

Prior to undertaking any examination, treatment and care clinicians must ensure that the Appropriate consent has been gained. Where relevant the associated documentation must be completed or the information recorded in the medical notes. Obtain written consent (where possible or verbal) from the individual. For further information see Trust: Policy for Consent to Exam or Treatment.

Photographs will be taken on initial assessment or as soon as possible if the digital device is not available on the day. The wound should be re-photographed: Every 2 weeks or if there are any significant changes or concerns regarding the wound. Regular photography of the wound provides a useful visual record.

- Photographs should be labelled with the individuals NHS number, name, date of birth, date of photo, wound position and the name of the health care professional who has taken the image. Include a ruled measure to give an indication of scale. Secure/upload in the patient's records in chronological order or print clearly labelled (Appendix 2, 3).
- Privacy and dignity should be protected and maintained at all times
- If photographs are used for training purposes confidentiality must be maintained and appropriate level of consent is gained.
- Images can only be used for publication with specific consent (Individual agreement for photography and release of data for third party use)

Photographs should not be taken using a non NHS secure device and images should be deleted from the device as soon as they are transferred to their secure documentation system.

4.15. Safe discharge for patients with complex wounds:

- Patients discharged with wounds will have details of their wound management plan within the Electronic Discharge Summary (EDS)
- Supply of dressings for 3 days.
- Referral to appropriate community services team

4.16. Referrals to Tissue Viability

- Referrals to the Tissue Viability Service are in accordance to their admission to caseload criteria Referrals should be are made electronically E referral or telephone messaging service. (Appendix 10).
- Patients with diabetes who have new or deteriorating foot wounds must be managed and referred in accordance with the Diabetic Footcare Team (Appendix 1).

5.0. Implementation

5.1. Plan for implementation

- This is a reviewed document, to ensure all clinical staff are aware of the updated document via the Trust intranet and cascading through the Divisions

5.2. Dissemination

- Circulation via Divisional Governance Groups, Divisional Directors of Nursing, Matrons, Ward/Dept. Managers and Tissue Viability Champions.

5.3. Training and awareness

- Wound Assessment and Management Study Days
- Tissue Viability Champions Events
- Preceptor Courses
- International Nurses
- TV Website

6.0. Monitoring and compliance

- Monitoring compliance with this policy will be the responsibility of ward/team managers and the Tissue Viability team. This will be through either formal or informal monitoring of wound assessment documentation.
- Additional monitoring will be achieved via monitoring Tissue Viability referrals.

The table below should help to detail the 'Who, What, Where and How' for the monitoring of this Policy.

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the Policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	Completion of wound assessment charts	Audit completion of wound assessment charts.	Every 6 months	Tissue Viability Team	Ward managers , matrons , Divisional directors of Nursing ,	Every 6 months

7.0. Policy Review

The Policy will be reviewed every 2 years, by the Lead Nurse for Tissue Viability.

8.0. References

Coleman S etal (2017) Devlopment of a generic wound care assessment minimum data set Journal of tissue Viability 26(4) 226-40

Department of Health (2006) *Code of Practice for prevention and control of Healthcare Associated Infections*. London: DoH.

Guest, J. Ayoub, N. McIlwraith, T et al (2017) Heath economic burden that different wound types impose on the UKs National health service. *International wound journal* 14 (2) pp:322 – 30

Journal of Community Nursing (2017) It's TIME to get to grips with wound assessment Vol 4 No 1

NICE (2016) Clinical guidance: Diabetic foot problems: prevention and Management

Pratt,R.J.,Pellowe,CM.,Wilson,J.A.,Loveday,H.P.,Jones,S.R.,McDougall,C and Wilcox, M.H.(2007).Epic2:National evidence based guidelines for preventing Healthcare Associated Infection in NHS hospitals England . Journal of Hospital Infection. 65(Supp.1 Feb.) S1-64

SDMA (2018) Code of Practice for the Promotion of Wound Care Products to Healthcare Professionals Revision 6 Version 2

Stacey, M. (2016) Why don't wounds heal? [Online] www.woundsinternational.com

The Midlands Critical Care & Trauma Network: https://www.mcctn.org.uk/

Timmons J (2017) Structured skin assessment introducing "S" of TIMES J wound Care today Vol 4 No 1 44-45

Worcestershire Wound Formulary 2020 https://herefordshireandworcestershireccg.nhs.uk/policies/clinical-medicines-commissioning/clinical-policies-and-guidance/wound-care/284-worcestershire-wound-formulary/file

Wounds UK (2016) Best Practice Statement: holistic management of venous leg ulceration

Wounds UK (2017) Best Practice Statement : Making day-to-day management of biofilm simple

Wounds UK (218) Best Practice: Improving holistic assessment of chronic wounds

9.0. Background

9.1. Equality requirements
The author must include the Equality Impact Assessment Table and identify whether the policy has a positive or negative impact on any of the groups listed. Supporting Document 1

9.2. Financial risk assessment: No Financial Impact implementing this policy
Supporting Document 2

9.3. Consultation

Contribution List
This key document has been circulated to the following individuals for consultation;

Designation

9.4. Approval Process
This section should describe the internal process for the approval and ratification of this Policy.

- This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee

9.5. Version Control
This section should contain a list of key amendments made to this document each time it is reviewed.

Date	Amendment	By:

Appendices

Appendix 1. Diabetic Footcare Pathway

Appendix 1
WAHT-NUR-090.pdf

Appendix 2. Photography Consent Form

Appendix 2
WAHT-NUR-090.doc.

Appendix 3. Lesson of the Week

Appendix 3
WAHT-NUR-090.pdf

Appendix 4. Top Tips Skin Tear

Appendix 4
WAHT-NUR-090.pdf

Appendix 5. Leg Ulcer Top tips

Appendix 5
WAHT-NUR-090.pdf

Appendix 6.Wound Assessment Chart and Care Plan

Appendix 6
WAHT-NUR-090.pdf

Appendix 7. Larvae Patient Information Leaflet.

Appendix 7
WAHT-NUR-090.pdf

Appendix 8. Wound Dressing Decision Chart.

Appendix 8
WAHT-NUR-090.pdf

Appendix 9. T.I.M.E.S Framework.

Appendix 9
WAHT-NUR-090.pdf

Appendix 10 Tissue Viability Referral Form

Appendix 10
WAHT-NUR-090.docx

Supporting Document 1 - Equality Impact Assessment Tool
To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

NHS Worcestershire Acute Hospitals NHS Trust

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	X	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Claire Hughes	**Acting Tissue Viability Lead Nurse**	**claire.hughes9@nhs.net**
Date assessment completed			

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title: Wound Assessment And management Guidelines.**			
What is the aim, purpose and/or intended outcomes of this Activity?				
Who will be affected by the development & implementation	X X	Service User Patient	❑ ❑	Staff Communities

of this activity?	❑	Carers Visitors	❑ ❑	Other _____	
Is this:	X Review of an existing activity ❑ New activity ❑ Planning to withdraw or reduce a service, activity or presence?				
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.					
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)					
Summary of relevant findings					

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		X		
Disability		X		
Gender Reassignment		X		
Marriage & Civil Partnerships		X		
Pregnancy & Maternity		X		
Race including Traveling Communities		X		
Religion & Belief		X		
Sex		X		

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Sexual Orientation		X		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		X		
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		X		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
		.		
How will you monitor these actions?				
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)				

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.
1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	Claire Hughes
Date signed	
Comments:	
Signature of person the Leader Person for this activity	
Date signed	
Comments:	

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	NO
2.	Does the implementation of this document require additional revenue	NO
3.	Does the implementation of this document require additional manpower	NO
4.	Does the implementation of this document release any manpower costs through a change in practice	NO
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	NO
	Other comments:	N/A

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval