East London NHS
NHS Foundation Trust

Wound Management Clinical Practice Guidelines

Tissue Viability Service

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1.0 Policy Summary

This document has been written by the Tissue Viability Service (TVS) and contains practical guidance for clinical staff on the assessment and management of patients with **chronic** wounds. It replaces previous local guidance published in 2016 and takes into account national and international recommendations (1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14,15,16,17,18,19, 20, 21, 22,23,). The following document should be read in conjunction with national guidance and the other Clinical Practice Guidelines in the TVS Portfolio on pressure ulcer prevention and management and leg ulcer prevention and management.

2.0 Overriding Duty of Care Statement

Should the content or operation of this policy be challenged on any grounds whatsoever then the impact on the past, present or future duty of care to patients will be taken to be a primary factor in deciding the outcome of that challenge.

3.0 To whom this Guideline applies

This document is aimed at practitioners working in East London NHS Foundation Trust who are responsible for the assessment and management of patients with wounds. Nursing Home and General Practice staff may also use the document where appropriate.

4.0 Background

This document contains practical guidance on the **general principles** of chronic wound management, including wound assessment, dressings and device selection, measuring and evaluating wounds, identifying and treating infection and referral pathways and wound photography.

5.0 Aims & Objectives

1. To provide practical guidance for clinical staff on the principles of wound management.
2. To promote an evidence based, standardised approach to the care of patients with chronic wounds
3. To promote rational prescribing, by encouraging safe, effective, appropriate and economic use of dressings and other products and services.
4. To provide a framework to ensure that the quality of wound care can be monitored and improved in line with the national agenda for improving quality and patient experience.

6.0 Quality Assurance & Audit

This document should be used to support wound management decisions. It does not replace professional responsibility, clinical judgment or more recent national guidance.

The principles upon which this document is based are:

- An individualised holistic patient assessment should be undertaken and evidence-based treatment plans commenced. These should take into account the wound aetiology,

patient's circumstances & wishes, the overall goals of therapy, the practitioner's clinical experience, available resources and knowledge of more recent research findings.

- Those who undertake assessment, planning, implementation and evaluations of care should be trained/educated/competent in wound management.
- The patient / carers should be informed and share in the decision making process and consent to treatment.
- To ensure continuity, the care should be clearly documented in the patient's records and made accessible to the patient and all those involved in their care.
- A collaborative, multi-disciplinary, inter agency approach should be taken to address all the needs of the patient where appropriate.
- Patients, staff and carers should have access to the equipment and resources necessary to deliver quality care.
- Monitoring and development of quality initiatives should be undertaken regularly through a clinical audit process.

7.0 Dissemination

This document is available to all staff on the trust Intranet site and paper copies can be made available upon request to the Tissue Viability Service.

Courses related to wound management will be held as part of the in-house annual education and training programme to introduce the standards of care within these guidelines.

This document will be subject to review in May 2022 or before if significant additional national guidance or relevant research is published.

8.0 Definition of a Wound

A wound is a break in the skin, which may result from physical, mechanical or thermal damage, or develop as a result of the presence of an underlying medical or physiological disorder. For example:

Physical damage: pressure ulcers
Mechanical damage: abrasions, grazes, lacerations, knife wounds (surgery), or bullet wounds and bites etc.
Thermal damage: burns caused by flames, chemicals, radiation, friction or electricity and frostbite.
Medical or physiological disorder: arterial or venous ulcers, autoimmune, endocrine, dermatology and haematological disorders, wounds associated with certain systemic infections, malignant diseases or neuropathy.

9.0 Wound Healing & Classification

Wound healing is a collective term for the physiological processes that repair and restore damaged skin tissue. Healing involves a complex series of molecular, cellular and chemical changes that result in inflammation, proliferation, granulation, re-modeling and re-epithelialisation. Wounding and healing involves a whole body response and the individual should be assessed and treated as a whole not just the visible injury.

Acute wounds proceed through the healing process in a timely manner as they generally have no underlying aetiology to disrupt a normal inflammatory response. Acute wounds that do not heal within four-six weeks or develop complications that delay healing may then be described as chronic.

Chronic wounds are generally characterised by the presence of underlying pathology and are generally associated with a persistent state of inflammation, which prolongs or interrupts the healing process. These wounds heal by a process called **secondary intention** where granulation tissue is produced. For example: pressure ulcers, leg ulcers, dehisced surgical wounds.

Non-Healing wounds: For some patients healing is not achievable, for example, with some leg/foot ulcers or malignant fungating wounds. The primary goals of care should be to maximise patient comfort and control symptoms such as exudate, odour and pain (6). The decision that a wound is 'non-healing' should be made by the multi-disciplinary team that includes the tissue viability service.

10.0 Factors Affecting Wound Healing

An individual's ability to heal and the time required can vary greatly, and are influenced by the following factors, which should be taken into consideration during assessment:

- General physical and psychological health and type and level of concurrent illnesses
- treatment: systemically and locally
- Nutritional and hydration status
- Type of wound, location, depth and extent of damage and type of tissue in wound
- Wound temperature, moisture level and pH balance
- Levels of bacterial colonisation and infection
- Blood supply to the wound and surrounding area & oedema of surrounding tissues
- Disruption to normal sleep pattern
- History of smoking and alcohol consumption
- Medications such as steroids, immune-suppressants and chemotherapy.
- environment

11.0 Patient Assessment

Successful wound management depends on holistic patient assessment and should include **physiological, psychological and social aspects**. Establishing wound aetiology depends on an understanding of the anatomy and physiology of the skin, pathology of wounding, intrinsic and extrinsic causative factors, the normal stages of wound healing and factors that may delay the healing process. When planning care the clinician must take into account the patient's circumstances & wishes and the overall goals of treatment.

The following information should be documented at the initial assessment:

11.1 Medical History

- Past & current medical condition and general health
- Drug history including current prescribed medications, alternative therapies and recreational drugs
- Smoking and alcohol history
- Allergies: including reactions to dressings, topical applications and natural rubber latex
- Nutrition and hydration level. Weight, height and Body Mass Index (BMI)
- Mobility
- Temperature, Pulse and Blood Pressure, blood sugar level, blood results, urinalysis
- Previous/planned investigations/procedures. For example: venous/arterial duplex, X-rays, surgery etc.

11.2 Nutritional Assessment

- All patients should have a nutritional screen, which proceeds to full assessment if deficit is suspected.
- Patients considered as 'malnourished', or 'at risk' of malnutrition should be managed according to local and national guidance.
- Nutritionally compromised patients who have wounds may have an increased dietary need and a referral to a Dietician should be considered for further assessment, advice and supplementation.
- Patient's weight, height and body mass index (BMI) should be recorded at initial assessment and then weekly for inpatients and monthly for patients in the community where facilities for weighing the patient are available.

11.3 Psychological & Social Assessment

The following aspects should be considered during the patient' assessment:

- Stress level, depression, ability to sleep and where the patient sleeps e.g. bed or chair.
- Ability to understand cause of wound and ability to participate in care
- Factors that may affect concordance with treatment. For example: dementia, lack of mental capacity, cognitive impairment, learning difficulties, and behavior and lifestyle choices.
- Drug / Alcohol dependency
- Occupation, family structure, carers and their ability to assist with care.
- Detail attitudes and any avoidance of social activities due to general condition and wound
- Consider referral to Community Psychological services if required

11.4 Learning Disability Assessment

- If the patient has a learning disability and help is required with assessment and management, consider a referral to the learning disability service and tissue viability team if required.

12.0 Wound Assessment

- The Triangle of Wound Assessment is a tool that can be used to assess patients and their wounds. It divides assessment of the wound into three areas: the wound bed, the wound edge and the periwound skin. It should be used in the context of a holistic assessment that involves the patient, caregivers and family (Dowsett et al 2015) See Appendix 1

12.1 Documentation

Use the template for Wound Assessment on EMIS, System one or if on Rio use the wound assessment chart (Appendix 2**)** to document findings. The following information should be documented;

- Date and time of assessment
- Type of wound and underlying aetiology
- Factors that could delay healing
- Location of the wound on the body
- Duration of the wound
- Wound measurements
- Depth of damage

- Type and color of tissue in wound bed
- Presence of infection
- Exudate levels and type
- Presence of odour.
- Pain
- Wound margins
- Periwound skin
- Dressing selection and regime

The wound should be re-assessed at each dressing change and measured at 4 weekly intervals or before if there are signs of deterioration.

12.2 Wound Type & Aetiology

Wound type and cause should be identified e.g. venous leg ulcer caused by venous hypertension or pressure ulcer caused by pressure or pressure in combination with shear.

12.2.1 Leg Ulcers

- Please refer to the Leg Ulcer Assessment & Management – Clinical Practice Guideline for specific assessment and management : http://elftintranet/Sites/Common/private/ajax_objectincontext.aspx?objectkind=2&objectid=28656&linktype=1&webboxid=undefined&ParentID=0

12.2.2 Pressure Ulcers

- Please refer to the Pressure Ulcer Prevention and Management – Clinical Practice Guideline for specific assessment and management : http://elftintranet/sites/common/private/search_quick20.aspx?q=pressure%20ulcer

12.3 Wound Measurements

Accurate measurement is an important part of wound assessment and can assist with:

- Detailing progress or deterioration by comparing dimensions over time
- Communication between health professionals
- Encourage the patient that healing is progressing
- Evidence of skin condition when admitted to, or discharged from, caseload

12.3.1 Wound Depth Assessment

Describe wound depth in terms of the anatomy of the skin and related structures. Use millimetres (mm) or centimeters (cms) to measure undermined tissue with a sterile measure. The following terms may be useful:

Blister: filled with serum or blood
Abscess: filled with pus
Superficial or partial thickness skin loss: skin loss involving epidermis and/or dermis, with or without undermining of adjacent tissue.
Full thickness skin loss: Damage involving subcutaneous layers, which may expose fat, bone, tendon or joint capsule, with or without undermining of adjacent tissue.
Sinus: A blind ended tract
Wound Fistulae: An abnormal passage from an internal organ to the body surface

12.3.2 Wound Length & Width may be taken with a disposable measuring tape and recorded in cms (available from your usual ordering route). Measure the length of the wound along the vertical axis of the body (from head to foot), and the width along the horizontal axis of the body.

12.4 Wound Photographs are a useful visual record for wounds that are difficult to trace, large, deep or irregularly shaped. Patient consent should be obtained in writing on the Trust wound photography consent form prior to wound photography. See Appendix 3. Images should be stored according to recommended guidelines.

12.4.1 Criteria for Wound Photography - see Appendix 3 for guide

- Obtain written consent from the patient
- Photograph the wound on initial assessment and repeat every four weeks or more frequently if the wound condition changes rapidly.
- Photographs should be labeled with the patient's NHS number, name, date of birth, date of photograph and wound position. Include a ruled measure to give an indication of scale.
- Secure/upload in the patient's electronic records in chronological order.
- All photographs should be clear and in focus.
- Privacy and dignity should be protected and maintained at all times.
- If photographs are used for training purposes confidentiality must be maintained.
- Images cannot be used for publication, without separate & specific consent.
- Wound images should be taken using a digital device Members of the tissue viability team will have access to a digital camera. Wound photographs should only be taken on Trust equipment e.g. iPads or Trust mobile phones. Personal devices should not be used to take wound images. The camera/mobile device should be cleaned after use to prevent cross infection
- Images should be deleted from the mobile device as soon as possible once the images have been uploaded onto the patient electronic record

12.5. Type of Wound Tissue

Wound assessments should include a description of the type and amount of tissue present using the T.I.M.E framework for example: epithelialising, granulating, sloughy, necrotic, or non-healing. See Appendix 4. Different stages of healing can exist at the same time and should be recorded as an estimated percentage of the whole wound e.g. granulation tissue 80% and sloughy tissue 20%. This allows comparison over time. Percentages are used as a guide only.

12.5.1 Necrotic tissue may appear **black**, hard, dry and leathery or grey in colour and usually indicates devitalised tissue. Assess the patient's circulation to the affected area before deciding on method of debridement. If digits or heels are necrotic do a Doppler assessment to determine Ankle Brachial, Pressure Index (ABPI) or refer for specialist vascular assessment and keep these types of wounds **dry** until circulation is established.

12.5.2 Sloughy tissue is also devitalised but may appear **yellow** or waxy white in colour and may be wet or dry and is usually attached to the wound base. Sloughy tissue requires debridement.

12.5.3 Infected tissue or cellulitis may appear an angry red colour, which extends past the margins of the wound. If this is associated with clinical signs of infection then systemic antibiotics are indicated with local wound management to control odour, pain and exudates. See Appendix 4. Chronic wounds are often colonised with bacteria therefore diagnosis of infection is a clinical decision and should **not** be made solely on the basis of a microbiology swab result. Care should be taken with patients who have conditions such as diabetes or who are immune-suppressed as they may not show the signs of infection.

12.5.5 Granulating tissue appears **red** with small mounds caused by growth of capillary loops and requires protection.

12.5.6 Epithelialising tissue appears **white, pink or mauve** in colour. This tissue should be kept warm (body temperature) and moist to facilitate epithelial growth.
Wound colour is related to tissue type and can enhance description of wound status.

13.0 Wound Management

Effective wound management is based on identifying and treating the underlying cause, addressing patient concerns and Wound Bed Preparation (WBP). The principles of WBP are wound debridement, infection prevention and control and effective exudate management.

13.1 Debridement

Debridement is the removal of necrotic, devitalised, sloughy or infected tissue, or foreign bodies from a wound. The body can debride itself by a natural process called autolysis; however, this may take time if large amounts of slough are present. Slough can provide an environment for bacteria to thrive, increasing the risk of infection. Debridement is recommended as a principle of wound management (6)

There are different methods of debridement.

- **Autolytic debridement**: where the body gradually sheds itself of devitalised tissue. This process can be augmented by the use of dressings such as hydrogels, hydrocolloids or capillary action dressings, alginates, foams, antiseptic dressings.
- **Monofilament Debridement:** Debrisoft monofilament debridement pad is a single use pad used to remove devitalised tissue, debris and hyperkeratotic skin around acute or chronic wounds. (21)
- **Bio-surgery**: sterile larvae (maggots)
- **Sharp debridement**: using a sterile blade, scalpel or scissors. This should **only** be undertaken by a healthcare professional with specific training and competence.
- **Surgical debridement**: used when there is an urgent clinical need to remove or drain devitalised tissue and when fast debridement would speed patient recovery. If this is required the patient should be referred to a surgeon.

When deciding whether or not to debride a wound or which method to choose, the clinician should consider the following; the condition of the patient and wound, condition of surrounding skin, the quality and strength of the underlying blood supply, risk of adverse incidents, patient preference, pain level, equipment and dressings availability and characteristics and the overall goals of treatment.

14.0 Peri-wound Skin (i.e. the skin within 4cm of the wound edge as well as any skin under the dressing)

Problems with the Periwound skin are common and may delay healing, cause pain and discomfort, enlarge the wound and adversely affect a patient's quality of life. The amount of exudate present is a key factor for increasing the risk of Periwound skin damage. Greater moisture exposure reduces skin barrier function and increases the risk of skin breakdown and maceration. This may make patients more susceptible to developing contact dermatitis. Erythema and swelling may also indicate infection. In addition to the

Periwound skin, patients with wounds should also be assessed for any problems that may be affecting their skin more widely.
The Periwound skin should be assessed for the following signs and recorded on the wound assessment chart.

- Maceration
- Excoriation
- Dry Skin
- Hyperkeratosis
- Callus
- Eczema

15.0 Wound Exudate

Exudate is a fluid produced from most wounds. It can vary in volume, consistency and biochemical composition and may be either beneficial or harmful to underlying tissues and surrounding skin. Some studies indicate that exudate is beneficial to healing acute or superficial wounds while others have found that chronic wound exudate contains enzymes that disrupt healing by degrading the extra-cellular matrix and excoriate surrounding skin. Quantifying the volume of wound exudate can be difficult. The following terms can be used to describe and evaluate the dressing: exudate interaction

Status	Indicator
Dry	Wound bed is dry; there is no visible moisture and the primary dressing is unmarked; dressing may be adherent to wound. **NB This may be the environment of choice for ischaemic wounds**
Moist/Low exudate	Small amounts of fluid are visible when the dressing is removed; the primary dressing may be lightly marked; dressing change frequency is appropriate for dressing type. **NB In many cases, this is the aim of exudate management**
Wet/Medium	Small amounts of fluid are visible when the dressing is removed; the primary dressing is extensively marked, but strikethrough is not occurring; dressing change frequency is appropriate for dressing type
Saturated/High	Primary dressing is wet and strikethrough is occurring; dressing change is required more frequently than usual for the dressing type; surrounding skin may be macerated
Leaking	Dressings are saturated and exudate is escaping from primary and secondary dressings onto clothes or beyond; dressing change is required much more frequently than usual for dressing type

Chronic wound management techniques and dressings are based on the principle of moisture balance. In general this means that:

- Drier wounds, (except those with poor circulation), should be moistened with dressings that hydrate tissue, e.g. hydrogels, hydrocolloid sheets and pastes.
- Wounds with excess exudate require dressings that absorb or control fluid, e.g. alginates, hydrofibres, capillary action, foams, Negative Pressure Wound Therapy (NPWT) and compression bandages, wraps and hosiery.

- Surrounding intact skin should be protected from exudate with barrier films, creams and absorbent dressings as it can cause excoriation.

  Type of exudate can be described as serous (thin/watery), or haemoserous (pink/red). If exudate is thick, cloudy, or purulent (yellow/brown/green) it can indicate infection.

16.0 Wound Cleansing

The rationale to cleanse wounds should include: Removal of debris, (e.g. foreign bodies, dressing residue and devitalised tissue), exudate from the surrounding skin and to refresh the patient. Routine cleansing of clean granulating wounds with the aim of bacterial removal has been proven to be ineffective. A guide to wound cleansing can be found in Appendix 5.

When cleansing and dressing wounds the practitioner should:

- Be familiar with the contents of the local Infection Control Policy
- Assess the risk of infection and cross infection and plan care accordingly
- Maintain hand hygiene and use Universal precautions
- Use non-woven sterile swabs as they shed fewer fibers than cotton wool
- Use a no-touch technique (gloved fingers should not touch the wound surface)
- Use dated sterile equipment appropriately. For example: forceps, scissors, dressings and do not reuse single use items
- All equipment should be stored and used according to manufacturer's instructions.
- All products used to dress the wound such as forceps, scissors, dressings and gauze etc. should be from sterile packs.
- Left over dressings should not be kept for use at the next dressing change or used for other patients.

16.1 Normal Saline (0.9% sodium chloride)

- Avoid using pressurised canisters as splash back may occur.
- Sterile normal saline should be used if the local tap water is not fit for drinking.

16.2 Tap Water

- Chronic wounds may be cleansed with tap water, or water which is suitable for drinking, showering or bathing is appropriate.
- Use minimal mechanical force when cleansing or irrigating the wound.
- Irrigation can be useful for cleaning a cavity ulcer
- Appliances used (e.g. bath, shower, etc.) should be cleaned before and after use with a multi-purpose detergent and dried, then wiped with an antiseptic.

16.3 Universal Cleansing System (UCS)

The use of buckets for cleansing of leg ulcers is now discouraged and has been replaced with a UCS Pad which is available on FP10 prescription or via your usual ordering route. If for any reason a bucket is used it should be lined with a new clinical waste bag.

16.4 Prontosan

- This is a wound irrigation solution and gel that contains betaine and polyhexanide, antimicrobial agents that can reduce bioburden in the wound bed. Suitable for use in a wide variety of wounds such as leg ulcers, pressure ulcer etc. The solution is used

to cleanse the wound and the dressing and gel can be used in low to moderately exuding wounds.

16.5 Topical Antimicrobial / Antiseptic Cleansing Agents

- Antiseptic solutions (e.g. hypochlorites, EUSOL, chlorhexidine and betadine iodine) should not be used for routine wound cleansing as they cause pain and reduce the proliferation of macrophages and lymphocytes, which are essential to the wound healing process.

17.0 Wound Infection

All chronic wounds contain bacteria, but not all are infected or should be swabbed for MC&S. Infection is the result of a complex interaction between the host, organism, wound environment and therapeutic interventions, which is complicated by bacterial virulence. Identifying wound infection should be viewed as a clinical skill which can be supported by laboratory findings when necessary. A thorough assessment of the patient and wound is required prior to diagnosis. Observe patient and wound for:

- Abscess, cellulitis, increased white blood cell count
- Increased wound exudate; serous, seropurulent, haemopurulent, pus
- patient feels unwell and has a pyrexia
- Increased heat production, redness and swelling (cellulitis) around the wound
- delayed healing or wound breakdown, discolouration of wound and surrounding skin
- granulation tissue that bleeds easily (friable tissue)
- increasing or unexpected pain
- pocketing in the wound (the wound bed develops pits or indents at various sites)
- bridging of tissue
- malodour

NB: Not all signs or symptoms will be present in all cases. This may be due to the type of bacteria, auto-immune impairment, diabetes mellitus, quality of vascular supply or the use of medications such as steroids, anti-inflammatory, immune-suppressants and chemotherapy etc.

Patients with wounds that show spreading cellulitis and/or systemic infection should have a tissue sample taken to identify the offending organism and to assess for differential diagnosis. The patient should be treated with broad spectrum antibiotics which in some cases may be given intravenously. Check wound swab results to ensure the patient is on the antibiotics appropriate for treatment. Topical antiseptic/antimicrobial dressings should also be used to help reduce the wound bio-burden (See section **18.1.10** for advice on the use of topical antimicrobial / antiseptic agents in wound management).

17.1 How to Take a Wound Swab/tissue sample

Before taking a wound swab, gently cleanse wound with water, either by irrigating or using sterile gauze. Do not use an antimicrobial cleansing solution as this may result in a false negative result. If wound surface is dry, slightly moisten the swab with sterile water. Use a zig-zag motion to draw the swab across the wound surface, while rotating the swab gently between fingers.
Fill in form with sufficient information for lab staff and Microbiologist to know from where and why the sample was taken.

18.0 Wound Dressing Selection

There are many dressings available on the market with different properties and modes of action. There is a paucity of evidence to support the choice of one particular dressing in preference to another for specific wound types, which makes evidence based dressing selection difficult. A range of dressing types may be required to meet the needs of the wound and the patient at different stages of healing. Therefore, selection should be made on an individual basis after thorough assessment and discussion with the patient. Please use the Trust Wound Management Formulary when selecting dressings. Available to download from the trust intranet
http://elftintranet/sites/common/private/search_quick20.aspx?q=wound%20dressing
The TIME framework and Triangle of wound Assessment should be used as an aid to wound dressing

The following characteristics should be considered when choosing a dressing:

- Have the ability to prevent penetration of capillary loops into the dressing material
- Be hypoallergenic, sterile and have a long shelf life
- Be cost effective and have an evidence base
- Maintain high humidity and optimum pH at the wound / dressing interface
- Remove excess exudate, toxic components & not release toxic chemicals, particles or fibers
- Allow gaseous exchange
- Provide thermal insulation
- Be impermeable to bacteria
- Be free from particulate and toxic contaminants
- Allow removal without causing additional trauma & be comfortable to wear
- Ensure the wound remains moist with exudate but not macerated (except wounds with no underlying circulation, which should be kept dry).

18.1.1 Dressing Types & Classification

Most dressings have been classified according their properties and mode of action. The following classification terms are generic and some products are listed as examples. This is not a full list and it is not an endorsement or recommendation of these products by the TVS. The practitioner should read the product literature when choosing and using any dressing as they may differ, even within the same category.

18.1.2 Hydrocolloids are occlusive dressings and contain a matrix of gelatin, pectin and carboxymethylcellulose (CMC) with elastomeric and adhesive substances attached to a polymer foam and film base. On contact with wound exudate the hydrocolloid matrix liquefies to form a moist gel, which softens devitalised and sloughy tissue, maintains moisture and promotes granulation. This dressing is not suitable for heavily exuding wounds. If over granulation occurs change to a semi-occlusive or foam dressing. Examples: DuoDERM® Extra Thin (ConvaTec)**.** Comfeel®, (Coloplast)

NB: Aquacel Extra® (ConvaTec) is also a hydrocolloid but is classified as a Hydrofibre™ and a Matrix Modulating dressing, by the manufacturers because it is made differently to form a fibrous material that has an exudate handling capacity similar to Alginates.

18.1.3 Alginates are made from alginic acid, which is found in certain species of brown seaweed and are designed to absorb exudate, form a gel and maintain moisture at the wound surface. Alginates are not suitable for wounds with little or no exudate.

Alginates should not be moistened prior to application as this reduces their ability to absorb exudate. Cavity wounds should only be packed lightly to prevent forming a plug and blocking drainage. Alginates are manufactured in the form of flat sheets, ropes and ribbons. Example Kaltostat ® (Convatec).

18.1.4 Foams are made from polyurethane foam and are designed to absorb exudate. They are available in various thicknesses and shapes, and are suitable for moderate to heavily exuding wounds. They are available with and without adhesive borders and can be used as primary or secondary dressings.
Examples: Allevyn® (Smith & Nephew) Biatain® (Coloplast)

18.1.5 Semi-permeable Adhesive Films are thin transparent sheets of polyurethane, coated with a film of acrylic adhesive. They are permeable to moisture vapour and allow some gaseous exchange but are impermeable to liquids and bacteria and as a result are termed 'semi-permeable'. They are useful for maintaining a moist warm environment on superficial wounds, such as cuts, burns or grazes or as retention aids around the margins of un-bordered hydrocolloids or non-adhesive foams. Practitioners should read each product information sheet for removal instructions as these can vary.
Examples: Tegaderm® (3m Healthcare)

18.1.6 Hydrogels are mostly made up of carboxymethylcellulose or starch polymer and are 80-90% water. They are available in the form of sheets or amorphous gels and are used to re-hydrating dry necrotic or sloughy tissue. Hydrogels should not be used on moderate to highly exuding wounds as this may contribute to maceration and excoriation of surrounding skin. Most hydrogels also contain humectants and preservatives such as propylene glycol, which may kill or reduce the effectiveness of maggots if not cleaned away prior their use. Some gels have been impregnated with Iodine and are available in paste or ointment format.
Examples: Intrasite® (Smith & Nephew) Nu-gel® (Systagenix).

18.1.7 Low Adherent Dressings and Wound Contact Materials are used as non adherent dressings and require secondary dressings to keep them in place and absorb any exudate. Some types are impregnated with paraffin or silicone Examples: Atrauman® (Hartman),

18.1.8 Odour Absorbent and Deodorising Dressings are low adherent dressings that have been impregnated with activated charcoal or silver. These products may reduce the odour but they tend not to remove devitalised tissue, which can harbour bacteria causing the odour. Examples: Carboflex® (Convatec).

18.1.9 Capillary Action Dressings are; multi-layer dressings made from polyester and cotton and are designed to rapidly absorb exudate and interstitial fluids. They have a central wicking layer that quickly distributes absorbed fluid throughout the dressing and create a sustained movement of fluid away from the wound bed. Example: Advadraw® (Advancis Medical)

18.1.10 Topical Antimicrobial / Antiseptic Dressings
This term means substances capable of broad spectrum bactericidal activity. This includes Gram-positive and Gram-negative, aerobic and anaerobic bacteria that are commonly found in wounds and are capable of causing infection in wounds healing by secondary intention. Examples include: Silver, Iodine, Honey and PHMB impregnated dressings.

Once thorough assessment of the wound has been carried out and the wound is considered to be either critically colonised, locally infected or has spreading infection, appropriate topical antiseptic/antimicrobial treatment may be started. These dressings should only be used for a maximum of 2 weeks, thereafter the patient and the wound should be reviewed and evaluated. If signs of infection persist or the wound is not progressing to healing then please refer to tissue viability using the recommended referral form (Appendix 7). Please refer to the Wound Dressings Formulary for details of products agreed for use within the Trust. This can be accessed on the trust intranet http://elftintranet/sites/common/private/search_quick20.aspx?q=wound%20dressing

18.1.11 Liquid barrier film/cream

Excoriation of the surrounding skin can be caused by frequent removal of adhesive dressings or contact with wound exudate, urine or faeces. This may be reduced by using a liquid film barrier or barrier cream. Choose a liquid film that does not contain alcohol to prevent staining on application. Example Cavilon® (3M Health Care) No sting barrier film or cream,

18.2 Negative Pressure Wound Therapy (NPWT)

Negative Pressure Wound Therapy (NPWT) is based on the principle that negative pressure, measured in mmHg, applied in a uniform manner to a wound surface will facilitate;

- increased local blood flow and stimulate growth of granulation tissue
- reduced interstitial oedema
- stimulated cell proliferation
- removal of cytokines and matrix metalloproteinase, which inhibit healing
- reduced bacterial load

NPWT therapy is available as a foam or gauze dressing attached via a port and tube to the Renasys Go machine or PICO a simple conformable innovative dressing with port attached to a small single use pump. These treatments may be used on patients under certain conditions. Please follow the recommended guidelines for ordering the Renays Go in Newham community (Appendix 8) and the manufacturer's instructions for use. PICO and the Renasys dressings can be prescribed on FP10 prescription.

18.2.1 Contra –indications and Cautions to NPWT

Contraindications	Caution
Osteomyelitis: NPWT is contraindicated in untreated osteomyelitis	**Weakened blood vessels:** patients who have weakened blood vessels, friable vessels and infected vessels (direct negative pressure may cause trauma or bleeding)
Malignancy: NPWT is not recommended in malignant wounds because it may stimulate proliferation of malignant cells	**Exposed delicate structures:** patients with exposed blood vessels, delicate fascia, exposed tendons or ligaments(direct negative pressure may cause trauma and bleeding
Non-enteric and unexplored fistulae:	**Bleeding:** wounds that are actively

There may be communication with underlying vulnerable organs	bleeding or where the patient is at high risk of bleeding or hemorrhage, receiving anticoagulant therapy and or platelet aggregation inhibitors (negative pressure could encourage bleeding as local perfusion will be increased and therefore blood loss will be greater)
Exposed vasculature, nerves, anastomotic sites or organs: if directly applied to exposed structures, NPWT can cause damage or rupture vessels due to the force of negative pressure	**Fistulae:** Wounds with enteric fistulae (these require special precautions to optimize therapy) Refer to Tissue Viability Specialist for these patients
Necrotic tissue with eschar present or thick slough in the wound bed: appropriate debridement should be performed before application of NPWT. This therapy is not designed to debride and quicker results will be obtained if the wound is debrided prior to the application of NPWT	**Patients requiring certain treatments:** special consideration and caution should be taken where patients require Magnetic resonance imaging (MRI), hyperbaric oxygen treatment, defibrillation, etc

18.3 Larvae (Maggots)

Sterile larval (Maggots) are one method of debriding sloughy or necrotic wounds Maggots secrete a powerful mixture of proteolytic enzymes that breakdown slough and necrotic tissue into a semi-liquid form that can then be ingested. Through ingestion, maggots have also been shown to take up and destroy bacteria. As maggots are living creatures, they must be stored, handled and disposed of appropriately. The suppliers suggest that maggots be delivered directly to the pharmacy or health centre on the day of application. Larval therapy can be prescribed on FP10, but is not on the Nurses Formulary. A prescription will need to be obtained from the GP or community matron. Although the cost of each separate shipment of larvae is relatively high, it may be a more cost effective way of debriding some wounds because it is faster.

18.3.1 Indications for use

- when a wound contains sloughy or necrotic tissue that needs to be debrided quickly
- Other methods of debridement are considered not to be appropriate.
- Patients (and family) are fully informed and have consented.
- Staff trained and competent in wound assessment, use and disposal of larval therapy.

18.3.2 Contra-indications

- Wounds that have a tendency to bleed easily
- Wounds or fistulae that communicate with the brain, body cavity or any internal organ.
- Wounds that are in close proximity to large blood vessels

For further information, training and support please contact the Tissue Viability Service.

19.0 Multiagency Involvement

- Consider appropriate referrals to the wider Multiagency teams for those patients with wounds and who have complex physical or mental health needs.
- The tissue viability team will follow up referred patients at 4 weekly intervals or sooner if required.
- The tissue viability service will attend all relevant multiagency meetings as required

20.0 Education & Training

Health care professionals involved in the care of patients with chronic wounds should be knowledgeable and skilled in the following areas;

- Pathophysiology of chronic wounds including: Pressure ulceration, leg ulceration etc.
- Wound assessment & differential diagnosis skills
- Use of Doppler ultrasound to measure ABPI
- Normal and abnormal wound healing
- Compression therapy – theory, management and application
- Dressing selection
- Skin care and management
- Health education
- Prevention of recurrence
- Criteria for referral for specialist assessment

It is important that all clinicians involved in the care of patients with chronic wounds maintain their clinical knowledge. This can be achieved through reading relevant literature, attending study days, courses and conferences. Please contact the Tissue Viability team for details of training available. The Tissue Viability Service is happy to provide tailor made sessions for individual teams to meet their needs.

20.1 Patient information and education

A number of patient information leaflets can be found on the intranet on leg ulcer prevention and management and pressure ulcer prevention and management, which can be printed and given to patients and carers. The leaflets are available to download from: http://elftintranet/sites/common/private/search_quick21.aspx?q=wound%20information%20leaflet&orderby=0

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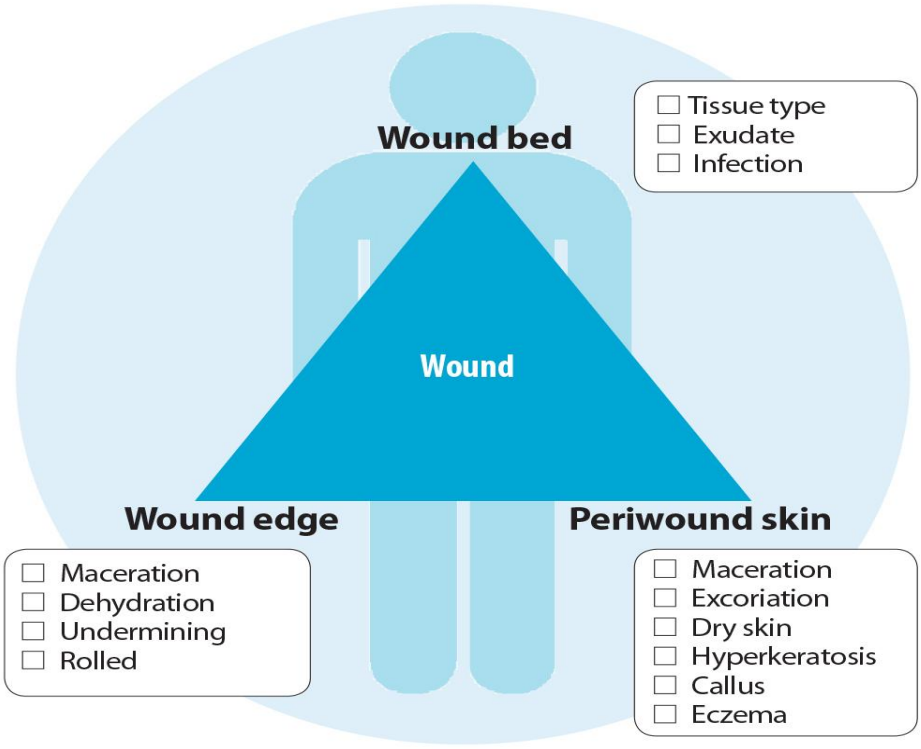
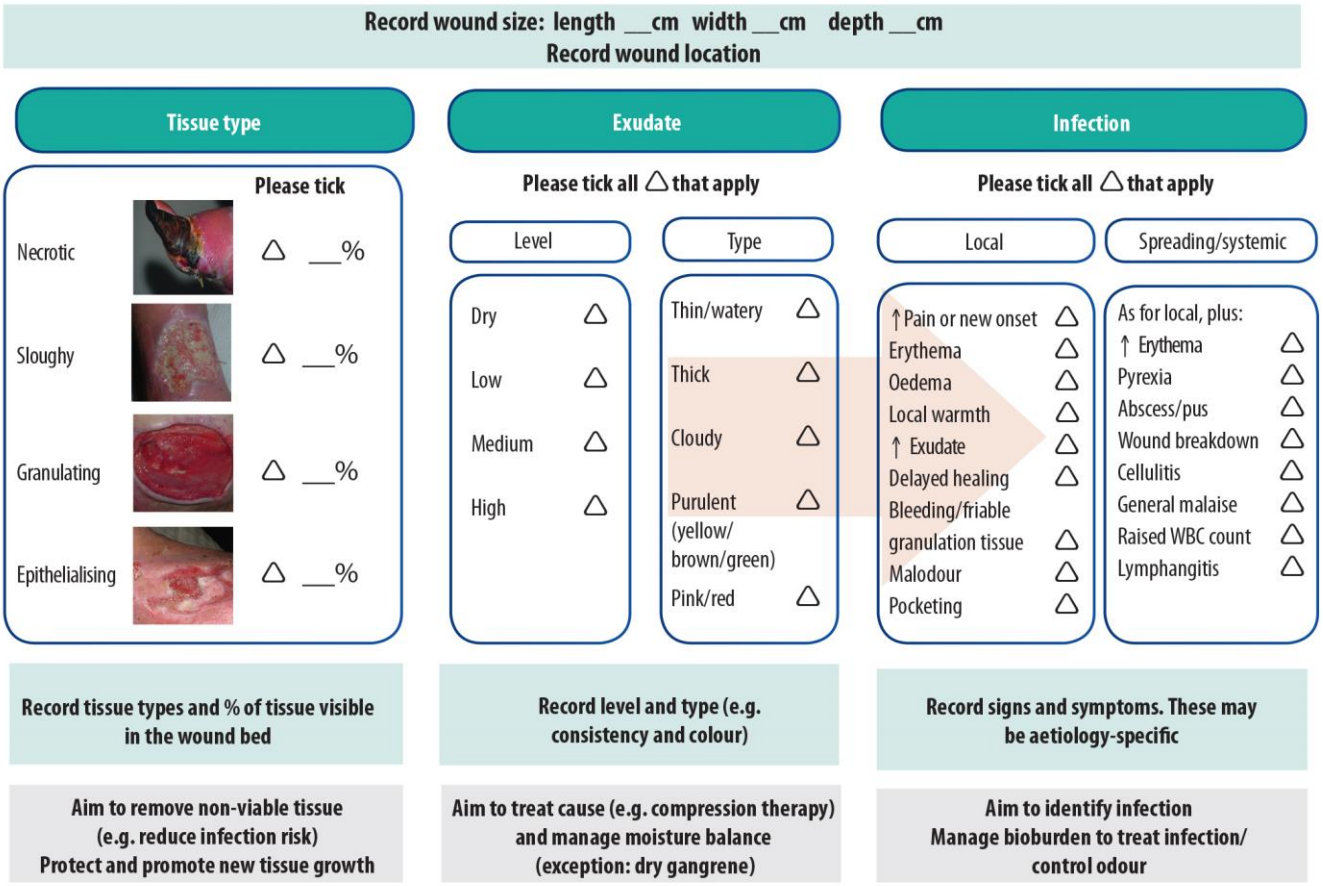
APPENDIX 1
Triangle of Wound Assessment



Dowsett, Protz, Drouard, France, Harding (2015) Triangle of wound assessment. Made Easy
Reproduced with permission from Wounds International May 2015.
The Triangle of Wound assessment is supported by an Educational grant from Coloplast www.woundsinternational.com

The Triangle of Wound Assessment – Wound Bed

Wound bed: look for signs of granulation tissue, while seeking to remove dead or devitalised tissue, manage exudate level and reduce the bioburden in the wound.

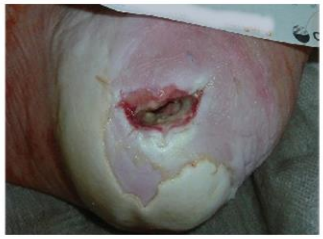


The Triangle of Wound Assessment – Wound Edge

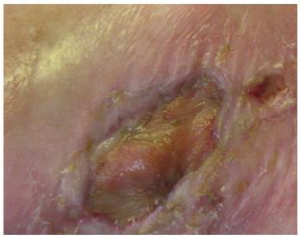
Wound Edge: Lower barriers to wound healing by reducing undermining for dead space, debriding thickened or rolled edges, and improving exudate management to minimise risk of maceration.

Maceration	Dehydration	Undermining	Rolled edges

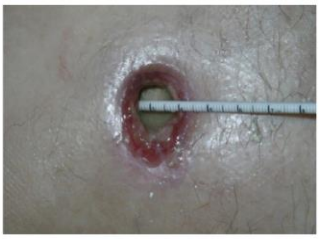
Please tick all △ that apply



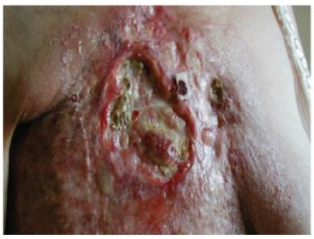
△



△



△  extent ____cm



△

Assess edge of the wound for moisture level	Assess edge of the wound for moisture level	Use clock positions to record position Record extent of undermining	Assess amount of rolling (may be associated with thickening)
Aim to establish cause and correct Address patient concerns Refer to specialist	Aim to establish cause and correct (e.g. rehydrate) Refer to specialist	Aim to reduce the amount of undermining/allow the edge to reattach (e.g. stimulate granulation)	Aim to return the wound edge to a condition that will permit epithethial advancement

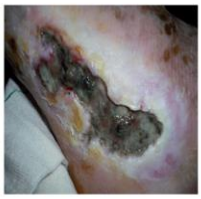
The Triangle of Wound Assessment

Periwound Skin

Periwound Skin: Rehydrate dry skin and avoid exposure to exudate/moisture to minimise the potential for damage

Maceration | Excoriation | Dry skin | Hyperkeratosis | Callus | Eczema

Please tick all △ that apply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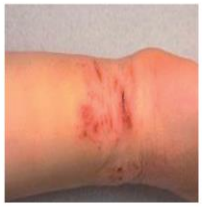
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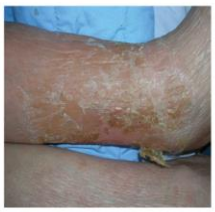
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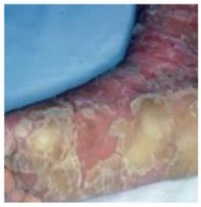
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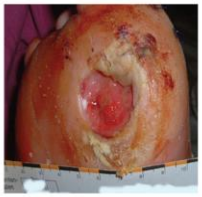
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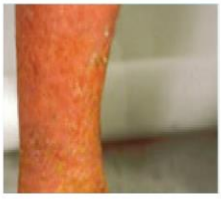

△ __- __cm

Assess periwound skin and record extent of any problems, e.g. <1–4cm of the wound edge

Aim to protect periwound area and maintain intact healthy skin Establish cause and correct, e.g. minimise contact with moisture or rehydrate periwound skin	Aim to remove hyperkeratotic skin plaques and rehydrate	Aim to remove callus and offload to prevent recurrence	Aim to relieve symptoms and avoid allergens

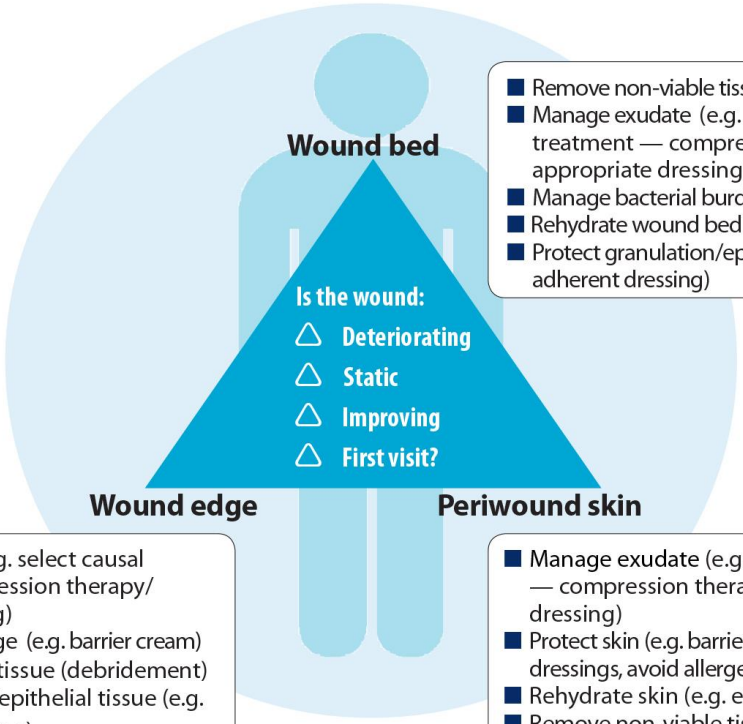
The Triangle of Wound Assessment

Devising A management plan

Treatment choices should aim to correct the underlying cause e.g. compression therapy to address underlying venous disease and offloading/pressure relief for the management of diabetic foot ulcers and pressure ulcers. In addition the aim should be to manage the local wound environment to promote wound healing by removing non-viable tissue, controlling exudate, preventing and managing infection

Accurate and timely wound assessment is important to ensure correct diagnosis and for developing a plan of care to address patient, wound and skin problems that impact on healing.

Identify treatment goal, e.g. 100% granulation tissue/ healed wound. **If no signs of improvement after 2–4 weeks, review treatment plan/refer to specialist**



- Remove non-viable tissue (debridement)
- Manage exudate (e.g. select causal treatment — compression therapy/ appropriate dressing)
- Manage bacterial burden (e.g. antimicrobials)
- Rehydrate wound bed (e.g. hydrogel)
- Protect granulation/epithelial tissue (e.g. non-adherent dressing)

- Manage exudate (e.g. select causal treatment — compression therapy/ appropriate dressing)
- Rehydrate wound edge (e.g. barrier cream)
- Remove non-viable tissue (debridement)
- Protect granulation/epithelial tissue (e.g. non-adherent dressing)

- Manage exudate (e.g. select causal treatment — compression therapy/appropriate dressing)
- Protect skin (e.g. barrier product/atraumatic dressings, avoid allergens)
- Rehydrate skin (e.g. emollients)
- Remove non-viable tissue (debridement)

APPENDIX 1

Wound Assessment Chart

(If not on electronic patient record)

WOUND ASSESSMENT & EVALUATION FORM. To be completed on initial assessment
(One to be completed for each wound)

Patient Name: Date of Birth: NHS Number:

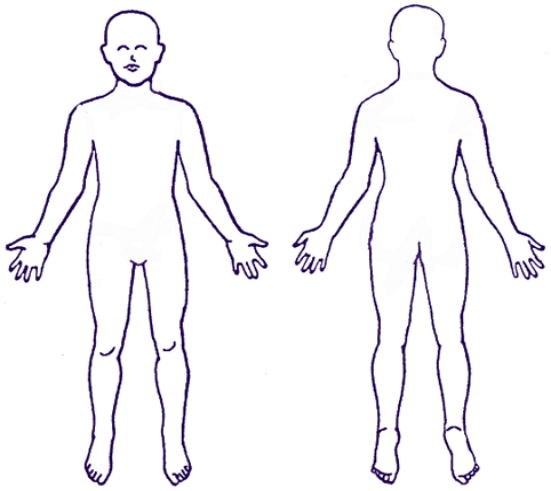
Assessment Date: Waterlow Score:

Current Medication:

Medical History:

Factors that can delay wound healing: Allergies:

Wound Location:



Wound Type:
□ **Pressure Ulcer**
□ **Grade……..**
□ **Moisture Lesion**
□ **Leg Ulcer**
□ **Trauma**
□ **Skin Tear**
□ **Surgical Wound**
□ **Dehisced Wound**
□ **Burn/Scald**
□ **Fungating Lesion**
□ **Pilonidal Sinus**
□ **Abscess**
□ **Diabetic Ulcer**
□
Other……

Wound size
Length (cm) **Width(cm)** **Depth(cm)**

Exudate:

Level	**Type**
□ Dry	□ watery
□ Moist	□ Thick
□ Wet	□ Cloudy
□ Saturated	□ Purulent
□ Leaking	□ Red

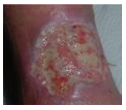
Signs of Infection Yes/No
Tick all that apply
□ Cellulitis
□ Abscess/Pus
□ Increased Pain
□ Increased Exudate
□ Malodour
□ Delayed healing/deterioration
□ Friable Granulation tissue
□ Pocketing at wound base

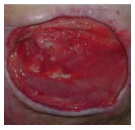
Wound Pain *(insert pain score 0 = no pain, 10 excruciating unbearable pain)*
0----------5----------
10

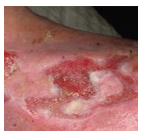
Pain Frequency
□ Continuous
□ Intermittent
□ Dressing change
□ Post Dressing

Tissue Type

Necrotic  %

Sloughy  %

Granulating  %

Epithelialising  %

Periwound Skin □ Healthy
□ Maceration □ Excoriation □ Dry Skin □ Hyperkeratosis □ Callus □ Eczema

Wound Evaluation: Monitor Progress every 2 weeks or sooner if condition changes									
Week **Date**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Size									
Length (cm)									
Width (cm)									
Depth cm									
Tissue Type%									
Necrotic Black/Brown									
Sloughy Cream/Yellow									
Granulating Red									
Epithelialising Pink									
Signs of infection - Y/N (see page 1)									
Exudate Levels **D = Dry** **M = Moist** **W = Wet** **S = Saturated** **L = Leaking** **Type** **W= watery** **T = Thick** **C = Cloudy** **P = Purulent** **R = Red**									
Surrounding Skin: M = Maceration, E = Excoriation, D = Dry, H = Hyperkeratosis C = Callous, E = Eczema									
I - Intact									
Pain level 0-10									
Pain frequency: C = Continuous, I = Intermittent, DC = Dressing Change, PD = Post Dressing									
Requires Analgesia pre dressing Y/N									
Treatment objective (Tick all that apply)									
Promote Granulation									
Protect Epithelialisation									
Debride									
Manage Infection									
Rehydrate wound									
Manage Exudate									
Protect Surrounding Skin									
Manage Pain									
Minimise Odour									
Periwound skin: Tick product required									
Barrier Cream									
Emollient									
Topical Steroid									
Wound Condition									
Deteriorating									
Static									
Improving									
Healed									
Primary Dressing									
Secondary dressing									
Bandage Regime									
Frequency									
Nurse Signature									

APPENDIX 2

Consent to Wound Photography

East London NHS
NHS Foundation Trust

Consent Form for use of photography/film/interviews/artwork

The work we do is often featured in newspapers, leaflets, reports and on the TV and radio. These often include the words or pictures of our staff, our patients and clients, their carers and relatives and local residents. We would like your permission to obtain and then publish or broadcast the following:

A **What we want to use [tick the boxes as appropriate]**

☐ Photographs ☐ Film/audiotape footage

☐ Interviews ☐ artwork/drawings

B **What we want to use it for:**

☐ Wound monitoring and evaluation ☐ Education and training

☐ Publications (e.g Leaflets, posters, newsletters, reports, displays, website etc)

Other – please specify

Declaration

I give consent for my words, pictures or images to be obtained and used as set out above. I confirm that I understand the nature of the use(s) that will be made of this information.

Signed…… (By parent/guardian if relating to a child under 16

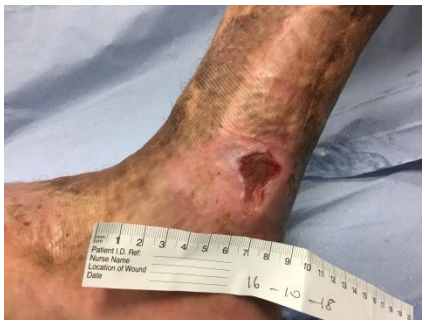
Name…… Dated…….
(Please print full name clearly)

Name of staff member obtaining consent……
(Please print full name clearly)

APPENDIX 3

NHS East London NHS Foundation Trust

TISSUE VIABILITY SERVICE WOUND PHOTOGRAPHY MADE EASY



Introduction

Wound assessment is an important process that allows clinicians, patients and carers to monitor the stages of healing detect the presence of complications and assess the effectiveness of treatment. These observations of the wound can then form the basis for clinical decisions including the selection of a suitable wound care regime.

Digital photographs are an important component of effective wound assessment and management. Digital photography in wound management adds objective visual confirmation to the written record and allows for continuous monitoring and evaluation. Wound photography may also be used for education and training and to support evaluations of products and devices, which may be published at a later date.

This made easy guide have been written to ensure best practice and standardisation of digital wound photography for the Tissue Viability Team.

Patient consent

The healthcare professional is responsible for ensuring the patient has given informed consent before any photography takes place. This consent will be documented in the patient's clinical record. A full explanation should be given to the patient for the reason the photograph is being taken. Photographs will not be used for any purpose other than for which consent has been obtained. If photographs are for the purpose of education and training or for a clinical evaluation and are likely to be published then consent should be obtained for this purpose. Care should be taken to protect patient identity by ensuring that faces or any other obvious features are obscured. A copy of the patient consent form can be found on the Trust website.

Equipment

Wound images should be taken using a digital device Member of the tissue viability team will have access to a digital device which can take photographs e.g. Trust IPad. Wound photograph should only be taken on Trust equipment. Personal devices should not be used to take wound images.

Taking photographs

Ensure the digital device is pre-set to record the date and time picture is taken. Care will be taken to protect patient identity by ensuring that faces or any other obvious features are obscured. Patient dignity and modesty will be protected by ensuring minimum patient skin exposure. Genitalia will be covered to preserve dignity. If damage is around or on genitalia and safeguarding is a concern, clinical judgement should be used.

The wound and surrounding skin should be cleansed prior to the photograph being taken and a visual measurement scale used in each photograph with the date recorded on the scale. This will be placed next to the wound. Paper sterile ruler supplied in dressing pack should be used for this purpose. The patient's identification/initials can be added to the sterile ruler. Please leave blank or use patient number if the photography is to be used for educational purposes or for dressing/device evaluations which may be published. Blue paper towel should be used as a background to the image to ensure no background images such as furniture in the

frame. The picture should be taken from a distance of between 25cm – 35cm. Follow up photographs will be taken with the patient in a similar position and from the same angle and distance to previous photographs to allow for comparison.

The iPad device should not come into contact with the wound. Clinician will ensure gloves are removed and hand washing undertaken between dealing with the patient/wound and using the digital device. Universal infection control principles should be followed.

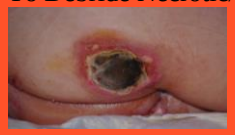
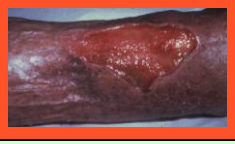
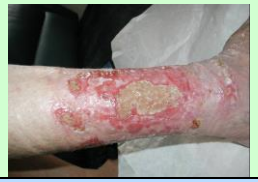
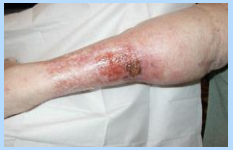
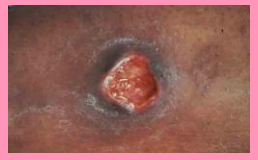
Storage of photographs

All Trust staff will be professionally accountable for the correct storage of all images that they have taken. Photographs should be stored in the patients' electronic record system unless they are being used for education and training or agreed dressings device evaluation in which case they will be stored on the tissue viability service shared drive in the relevant evaluation folder. These images should not contain the patient's initials. Photos should be deleted from the device as soon possible after the picture has been added to the clinical record or the shared tissue viability drive.

APPENDIX 4

T.I.M.E Frame Work for Wound bed Preparation

Wound Care : A T.I.M.E Approach

PROBLEM	AIM	METHOD/TREATMENT	WOUND CARE PRODUCT
TISSUE **Non-viable** **Necrotic/Sloughy** **Viable Tissue** **Granulation/Epithelialisation**	To Debride Necrotic/Sloughy Tissue  To Promote Healing 	Autolytic (For sharp debridement/larvae therapy refer to tissue viability services) Moist interactive wound dressings	Hydrocolloid for dry necrosis: **Comfeel Plus, Duoderm** Hydrogels to debride: **Intrasite, Nu- Gel** Foams **Allevyn, Biatain** Hydrofibre **–Aquacel** Alginate: **Kaltostat for bleeding** **Allevyn, Biatain, Bioclusive,Tegaderm, Comfeel Plus,, Adaptic Touch, Atrauman**
INFECTION	Prevention and Management of Infection 	Local infection Systemic infection	Antimicrobial therapy – C**adexomer Iodine. Honey: Silver , PHMB** **Systemic antibiotics** with **antimicrobial therapy as above**
MOISTURE **Imbalance**	To Promote Moisture Balance 	Treat underlying cause and control exudate (For NPWT therapy refer to tissue viability service) To protect surrounding skin	Compression therapy for venous ulceration/: **Profore: 4 layer, Actico short stretch, Coban 2 layer, Leg ulcer hosiery kit** Alginate: **Kaltostat for bleeding** Foams: **Biatain, Allevyn** **Barrier film Cavilon,**
EDGE **of Wound Non-Healing**	To Reduce Wound Size 	Measure wound: length, width, depth Re-assess cause	**by Tissue Viability** Refer to tissue viability service for **Larvae therapy, Negative pressure wound therapy** and further specialist advice

APPENDIX 5

Pathway for the Management of Wound Infection

Pathway for the Management of wound infections

ASSESSMENT

The diagnosis of infection is based on clinical signs and symptoms.
A full and detailed patient assessment should be carried out and signs and symptoms of infection identified from table 1.

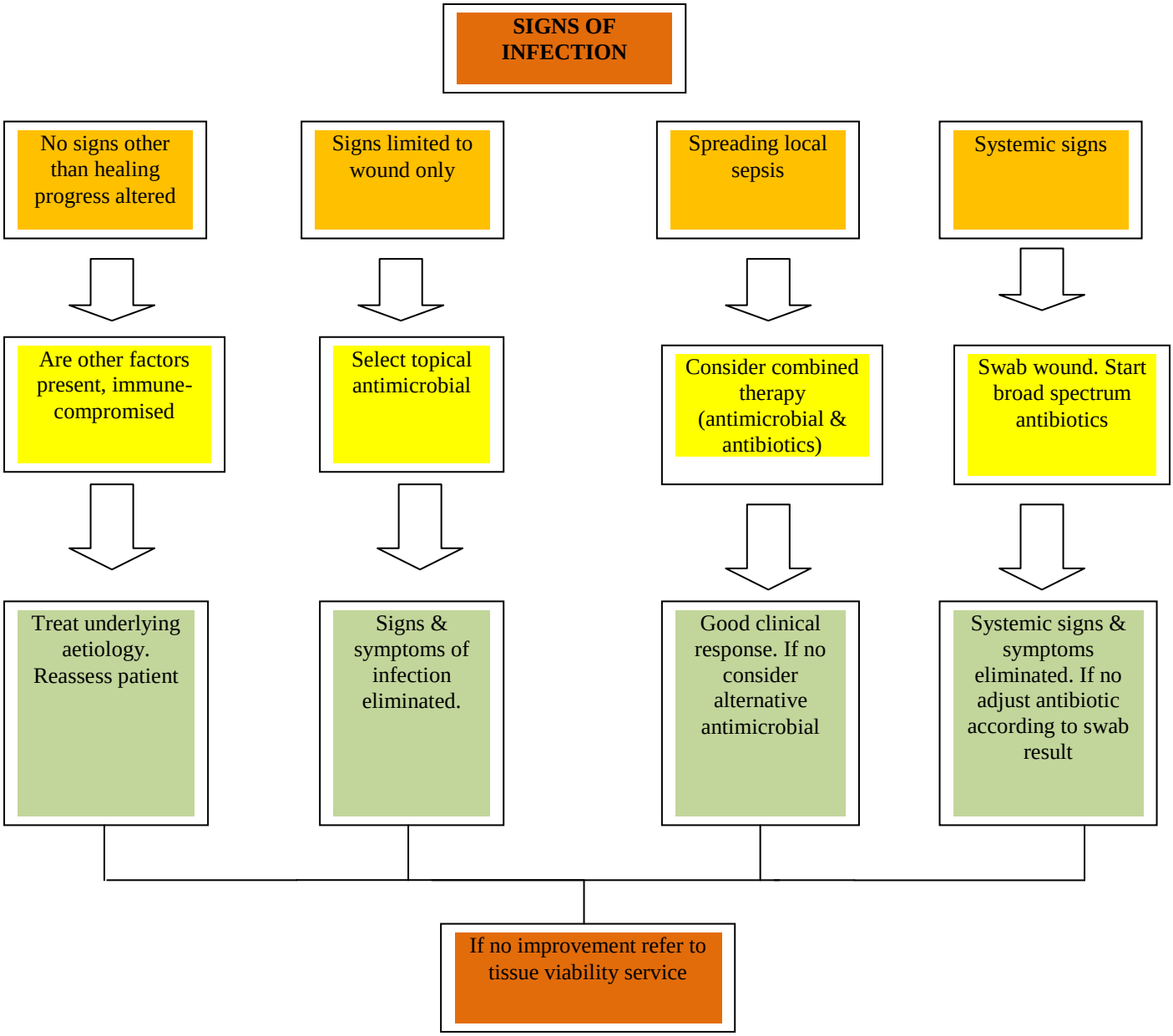
Table 1: Signs and symptoms of wound infection in acute and chronic wounds (WUWHS 2008)

	Signs and symptoms	Acute	Chronic
Local infection	**Abscess formation**	√	
	Unexpected new, increased or altered pain or tenderness	√	√
	Delayed healing	√	√
	Periwound oedema and swelling	√	√
	Redness (erythema)	√	√
	Localised warmth/heat	√	√
	Malodour	√	√
	Purulent discharge	√	√
	Fragile and/or bleeding granulation tissue		√
	Wound bed discolouration		√
	Induration		√
	Pocketing		√
	Bridging		√
Spreading infection	**Spreading erythema**	√	√
	Wound breakdown/dehiscence	√	√
	Crepitus in soft tissue	√	√
	Malaise and non-specific deterioration in patients condition	√	√

MANAGEMENT

Treatment aims should address

- **The underlying cause of the wound**
- **The microorganism causing the infection**
- **Removal of the microorganisms that have invaded the tissue**
- **Removal of dead tissue**
- **Providing support for the patient's immune system**



When selecting an antimicrobial consider	Antimicrobials on The ELFT formulary
Need to debride dead tissue Exudate levels Pain Wound shape and size Cost	Cadexomer Iodine - Iodoflex PHMP - Prontoson Gel X Honey – Algivon, Activon Tulle, Actilite Silver – Acticoat Range, Biatain alginate ag

NO MORE THAN ONE BOX OF DRESSING SHOULD BE PRESCRIBED AT ANY ONE TIME. IF NO IMPROVEMENT REFER TO TISSUE VIABILITY TEAM

Appendix 6

A Guide to Wound Cleansing

Wound Cleansing Technique Guide

The following Wound Cleansing Guide has been adapted from the Royal Marsden Hospital Manual of Clinical Nursing Procedures for use in the Community.

WOUND CLEANSING TECHNIQUE FOR GENERAL WOUND CARE		
No	**Action**	**Rationale**
1	Explain and discuss procedure with the patient. Ensure patient is comfortable and has had analgesia as prescribed and required	To ensure that the patient understands and consents to the procedure and is comfortable and pain is controlled.
2	**Hospital/Clinic** – Clean trolley or working surface with general purpose detergent and wipe over with chlorhexidine in 70% spirit and dry with a paper towel. **Patients home** – ensure that the work surface is clear from clutter, clean and dry.	To provide a clean working surface
3	**Hospital/Clinic** – place all equipment and products required for the procedure on the bottom shelf of the trolley **Patient's home** – ensure all the equipment is brought near to the work surface	To maintain the top shelf as a clean working surface To ensure all equipment is within easy reach while doing the procedure
4	**Hospital/Clinic** - Screen the bed/chair/ treatment couch. **Patient's home** – Maintain privacy as much as conditions allow Position the patient comfortably so that the area to be dealt with is easily accessible without exposing the patient unduly Prepare the patient and area before opening the dressing pack, dressing or products. **Hospital/Clinic** – Take the trolley to the treatment area disturbing the screens as little as possible	To maintain the patient's privacy To maintain the patient's dignity, and comfort To allow dust and airborne organisms to settle before the sterile field, products and wound is exposed. To minimize airborne contamination
5	Standard precautions should be used. **Patient's home** – If suitable washing facilities are not available alcohol gel or hand rub may be used before and after the use of gloves	To reduce the risk of cross infection or contamination of the wound
6	Loosen the dressing tape or bandage	To ease dressing removal
7	Check all sterile equipment is undamaged, intact and dry and has not exceeded the expiry date	To ensure that only valid sterile products are used
8	Open sterile field using the folded in corners of the paper Place opened products on the sterile field or open packaging but leave product within outer wrapping if sterile field/dressing pack is not used.	So that areas of potential contamination are kept to a minimum To reduce disruption to procedure while wound is exposed
9	**Hospital/Clinic** – Wash hands according to Infection Control Manual **Patient's home** – If suitable washing facilities are not available alcohol rub or hand gel may be used before and after the use of gloves	Hands may have become contaminated by handling outer packets etc.
10	Remove used dressing with gloved hand covered with the disposable bag, turn bag inside out with dirty dressing inside and stick to trolley or near working area	Performed at this stage to reduce length of time wound is exposed To contain dirty dressing
Carry out procedure		
12	Dispose of waste in yellow plastic clinical waste bags **Hospital/Clinic** - send clinical waste for incineration **Patient's home** – dispose of as clinical waste or in household rubbish according to local policy.	To prevent environmental contamination

APPENDIX 7

Referral Form to Tissue Viability Service

Tower Hamlets - referral to Accelerate CIC- online form
Wound referral - AccelerateCIC for lower legs

Pressure ulcers/ wounds refer to tissue viability via Tower Hamlets community nurse's referral form

Referral Form to Tissue Viability Services for Newham Community/East London mental health wards
The Centre Manor Park 30 Church Road London E12 6AQ Tel 020 8553 7484

Please complete and email to **tissueviability.service@nhs.net**

Patient Details	
Patients Name	Address: Telephone No:
Date of Birth	NHS Number
GP' s Name & Address Telephone No:	Nurse Telephone No:
Medical History: (or attach EMIS Summary) Allergies:	Medication:
Assessment	
WATERLOW Score: Skin assessment completed: Yes ☐ No ☐	MUST nutritional score: Pain score – patient reported 1-10 ☐
Wound Assessment	
Wound Type: Leg ulcer ☐ Pressure ulcer ☐ Diabetic foot wound ☐ Surgical wound ☐ Laceration/abrasion ☐ Other ☐ Wound cause: Wound location: Wound duration:	
Leg ulcers: Venous ☐ Mixed ☐ Arterial ☐ Other ☐ DOPPLER ASSESSMENT DATE: ☐ ABPI Right leg ☐ Left leg ☐	**Pressure Ulcers:** Grade 1 ☐ Grade 3 ☐ Grade 2 ☐ Grade 4 ☐ **Please provide Doppler result for heel pressure ulcers** ABPI Right Leg ☐ Left leg ☐ Datix report completed ☐ Safeguarding Alert Raised ☐
Wound Measurement: Maximum length & width & depth _____ **T**issue type: % Epithelialising ☐ Granulating ☐ Sloughy ☐ Necrotic ☐	**I**nfection: Clinical signs of Infection: Yes/No List signs and symptoms: _____ **M**oisture levels: High ☐ Moderate ☐ Low ☐
Wound Dressings and Equipment	

Primary dressing: Secondary dressing:	Frequency of dressing change:	Compression therapy: Equipment issued:
Name of Referrer: Contact number:	Reason for referral:	Date:

Beds Community Wound Care & Tissue Viability Services
Beds Tissue Viability Services, Queensborough House, Friars Walk, Dunstable, LU6 3JA
Tel: 01582 709047

wound.care@nhs.net

Please complete in full.
Failure to do so will result in return of referral and possible delays in appropriate patient care.

NHS No:	**Address of Patient**:
Patient Name:	
Patient Date of Birth:	**Nursing Home Contact Number**:
Patient Ethnicity:	**Name of Referrer**:
Patient Religion:	**Date of referral**:
Patient Allergies:	**Any recent hospital admissions/referrals**:
	GP name and address:
Is the Patient mobile?:	

Type of Wound
(Please tick below)

Leg Ulcer ☐	Pressure Ulcer ☐	Moisture Lesion ☐	Diabetic Foot Ulcer ☐
Burn ☐	Trauma (eg: Skin Tear) ☐	Post-Op ☐	Other ☐

Location of Wound:	
Duration of Wound:	
Size of Wound:	

Relevant Medical History:	**Current Medication**:
Present Dressing Regime:	**Swab Results (if recent)**:

TISSUE TYPE		Epithelisation (pink)	☐
		Granulating (red)	☐
		Slough (yellow/tan/green/grey)	☐
		Necrotic Tissue (black/brown)	☐
		Does wound bleed easily?	Yes ☐ No ☐
INFECTION	Does the patient exhibit any of the following?	Increase in wound size or not healing	☐
		Odour	☐
		Increase in exudate levels	☐
		Increase in slough	☐
		Surrounding skin hot and red	☐
		Change or increase in wound pain	☐
		Is the patient unwell/feverish?	Yes ☐ No ☐
MOISTURE		Dry wound	☐
		Wet wound	☐
		Maceration (white soggy skin surrounding wound)	☐
		Excoriation (red and sore, possibly weeping)	☐
EPITHELISATION	Edges Advancing	New pink skin forming	☐

If the wound is a PRESSURE ULCER, please answer the following:

Waterlow Score:	
MUST Score:	
Recent Weight Loss:	

Surface	Please specify equipment in place (e.g. mattress, cushion or other aids):
Skin	Frequency of skin inspection:

Keep moving	Repositioning regime:
Incontinence/Moisture	Management regime:
Nutrition	Type of diet (Normal/Fortified/Pureed):

APPENDIX 8

Guidelines for ordering and using Negative Pressure Wound Therapy in Newham Community

For Tower Hamlets and Luton and Beds contact TV team directly

Guidelines for Newham District Nurses Ordering and Commencing Negative Pressure Wound Therapy

RENASYS GO