Rotherham Doncaster and South Humber NHS Foundation Trust

Wound Management Procedure

(Tissue Viability and Wound Care (TVWC) Manual)

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1. INTRODUCTION

A systematic approach to holistic wound care is essential for the delivery of high quality wound care. Holistic wound assessment considers the whole person and should comprise the components of the generic wound assessment minimal data set.

Therefore holistic assessment is key to gathering information on the patient and their wound. This information should be documented at each review so that it can act as a baseline against which wound progress can be tracked and used to guide management decisions.

Inaccurate or lack of assessment can result in appropriate care and delays in healing, unnecessary patient suffering, poor outcomes and the inappropriate use of resources

2. PROCEDURE

2.1 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:

- if the condition of the patient deteriorates e.g. they develop an acute medical condition or an existing comorbidity deteriorates
- 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).

2.2 Generic wound assessment minimal data set

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

Table 1 Generic wound assessment minimal data set (Coleman et.al 2017)	
Domain	**Core data set items**
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
Specialists	• Investigation for lower limb wounds (Ankle Brachial Pressure Index APBi) • Referrals (Tissue viability (TVALS) Podiatrist, Hospital consultant, GP)

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.

Holistic wound assessment inevitably involves the completion of form – for the Trust it is a Wound Care Interrogated Pathway of Care (IPoC) found in the patient's linical record on the electronic system TPP SystmOne. However, practitioners should avoid completing forms ritualistically. They should consider what each assessment finding means, what implications it may have for management and how the care plan should address issues that require intervention.

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Think holistic assessment; What am I looking for? What have I found? What does it mean? What should I be doing about it?

2.3 Wound assessment with TIMES

The Trust adopted 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

TIMES provides a framework to guide structured local wound assessment as part of an overall holistic assessment of the patient. The findings of assessment should then be used by the clinician to guide treatment of both the patient and their wound(s).

Repeated reassessment and documentation of findings allow clinicians to systematically apply appropriate management strategies which can then be adapted as the wound progresses or deteriorates.

For some patients to achieve end wound healing is not the goal but symptom management e.g. control of odour, management of exudate.

Appendix 14 Wound Management guidelines with TIMES

2.3.1 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.

2.3.2 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 (>10cm²)
- 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.

The use of wound swabs to identify wound infections is controversial, as it may only reveal surface bacteria and not the resident bacteria in deep tissue that may be causing infection; conversely, it may also identify organisms that are present but not problematic.

Refer to Infection Prevention and Control Policy and Procedure for direction for wound swabbing and the technique to be employed for taking the swab

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.

2.3.3 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.

2.3.4 E – Edge

Examination of the edge of the wound can assist in the indemnification 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

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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.

2.3.5 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.

3 Wound Healing with TIMES

The wound healing process is complex and is affected by numerous general and local factors. It is essential to treat the whole person and not just the wound insolation. Guidance is provided in the Trust for dressing selection in line with the principles of **TIMES**

Appendix 14 Wound Management Guidelines with TIMES

3.1 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.

3.1.2 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, hydrofibres 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.

3.1.3 Sharp / surgical debridement

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 readily available in the community by referral to Podiatry.

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.

3.1.4 Larval debridement

Involves the use of sterile larvae to remove slough and is available on FP10. 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.

Appendix 12 Larval Debridement Therapy Pathway

3.1.5 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. Evidence to support these methods is limited, and they are not recommended as a first line treatment.

4 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.

Please refer to the Trust's policies for Infection control and prevention for guidance on:-

- standard infection control procedures
- hand hygiene
- management of clinical waste
- collection of specimens (taking a wound swab)

Wounds should not be routinely swabbed. A 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.

4.1. 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.

Appendix 10 Prontosan Wound Irrigation

5 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.

6 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, Renasys Go™ or Touch™with canisters for wounds with heavy exudate, PICO™, single use and canister free with wear time of upto 7 days, 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.

7 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 intertstal space.

- maceration/excoriation – can occur when the dressing selected is unable to manage volume of exudate being produced and so overflowing onto the surrounding skin. Reassessment of the wound dressing product is required and the skin protected with a barrier product to protect from further injury.

8 Wound cleansing

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

Appendix 11 Wound Cleansing Policy

9 Selection of Wound Dressing 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.**

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 falls into the following categories:-

- a deep dull constant pain
- a superficial burning type pain
- a neuralgic type pain
- an ischaemic type pain

- the pain resulting from cellulites

Whatever the cause of the 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.

The wound dressing product should be used in accordance with the manufacturer's instructions. Give consideration to the biochemical reactions of combining interactive dressing. Best practice combines the primary and secondary dressing of the same manufacture e.g. Intrasite (Smith & Nephew) Primary and Allevyn Lifre (Smith & Nephew) Secondary.

If there is leakage or strikethrough causing a break in the barrier that the dressing provides to external contamination, the dressing should be changed. If it not possible to change the dressing in a timely manner, then appropriate physical barriers need to be established, with application of dressing pad over area of strikethrough. If leakage or strike-through occurs frequently it would be appropriate to re-evaluate the dressing product choice.

The effectiveness of the selected dressing product should be evaluated after one week, unless there is an adverse reaction to the dressing product. Any suspected adverse reaction from the wound dressing product should be reported via the Trust clinical incidence reporting system (IR1).

The effectiveness of the dressing product and wound assessments/ evaluations should be be re-assessed at each dressing change and recorded in the patient's records SystmOne.

Within Doncaster Community dressings are supplied via an on-line non-prescription pick and pack ordering process. Dressings supplied maintain their legal status of prescribed items (whether the patient pays for the prescription or not) and are the property of the patient for whom they are issued.

Dressings within the inpatients' areas are ordered via the Regional Distribution Centre (RDC) or formulised localised arrangements

Dressing required off formulary can be acquired for the patient with the completion of the appropriate form and signed by a Nurse Prescriber.

Appendix 13 Doncaster Community Woundcare Formulary

If a wound fails to respond to treatment then refer to a more senior colleague. Consider referral to the Tissue Viability and Lymphoedemea Service for specialist advice and guideance

10 Wound type – Acute

Acute wounds heal within a expected time frame and they heal by primary, secondary or tertiary intention

10.1 Surgical wounds

Surgical wounds healing by first intenetion 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-orinated e.g. time span 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-permable film or island island dressing can be employed.

If there is a breakdown of the surgical wound follow the princlpes of **TIMES** to assess the wound and selection of dressings to promote healing.

10.2 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;

Follow the princlpes of **TIMES** to assess the wound and selection of dressings to promote healing; the position of the wound may influence dressing choice.

For skin tears guidance is provided;

Appenidix 1 Upper body skin tear pathway

Appendix 2 lower skin tear pathway

10.3 Thermal wounds

Burns and sclads require intial treatment to cool; for deep/extensive burns follow the advice provided by the burns unit/surgical team.

If not referring to a specialist service complete **TIMES** assessment and review the patient after 24 – 48 hours to reassess the size of the area affected and possible blistering.

11 Wound type – Chronic

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.

11.1 Lower leg wound

Lower leg wounds presentations are due to a number of underyling pathologies, including venous disease, arterial disease, rheumatoid arthritis and complication of diabetes.

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

- general assessment of the patient
- diferential diagnosis of Ankle Brachial Pressure Index (APBi) with Doppler ultra sound/Medi APBi/Vascualr assist.
- diagnosis of diabetes

Follow the princlpes of **TIMES** to assess the wound and selection of dressings to promote healing.

Appropriate bandage regime to support tissue and/or offer compression therapy where clinically appropriate.

11.2 Pressure ulcers

Pressure ulcers are caused by:

- unrelieved direct pressur
- shear or friction
- moisture
- or a combination of the above

Follow the princlpes of **TIMES** to assess the wound and selection of dressings to promote healing.

Eliminate or remove the cauasative underlying factors e.g off load the pressure, manage the moisture, have moving and handling technique that have no shear or friction effects on the skin.

11.3 Fungating wounds

A fungating wound is a cancerous lesion, either primary or metasatatic, that infiltrates the skin and it's blood and lymphatic vessels.

The priorities of care are to ensure the patient as 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.

Follow the princlpes of **TIMES** to assess the wound and selection of dressings to promote the patients aims of treatment e.g. exudate management, odour control

12 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 the Trust produce a leaflet this suggests food items to support an enriched diet.

Appendix 7 Food First

For patients presenting with difficulties with nutritional status relating their presenting with dementia, the Trust produce a leaflet with suggestions for support

Appendix 8 Eating, Drinking and Swallowing Awareness in Dementia

12.1.1 Protein

Protein is required for healing tissues; requirements: 1.2 – 2.0g protein/kg/24hrs. Without adequate protein normal protein synthesis and wound healing are inhibited. The immune response is diminished and there is a delay in matrix formation.

Protein sources: Meat, fish, eggs, milk, cheese, yoghurts, pulses and nuts.

Nutritional sip feeds will provide important sources of protein and other nutrients if dietary intake is inadequate.

12.1.2 Energy

An adequate energy/calorie intake is essential; requirements: 30-40 Kcal/kg/24hrs in order to prevent dietary and tissue protein being used as a source of energy rather than for wound healing.

An excessive intake of energy, leading to obesity, also gives rise to problems with wound healing – decreased mobility, increased weigh bearing and vascular insufficiency may precipitate wound complications and increase the risk of pressure sores. For obese patients during recovery from major surgical or trauma wounds, a strict weight-reducing diet during this time is inappropriate, good quality nutrition is vitally important.

It is important to remember that overweight does not necessarily mean well nourished. Malnutrition is a widespread problem which affects obese and underweight patients.

Energy sources: All foods provide energy and preserve tissue protein;

Carbohydrate sources – bread, potatoes, breakfast cereal, rice and pasta, oils, spreads, butter, margarine, fried foods;

Fat sources - oils, fats, butter, margarine, fried foods

12.1.3 Fluids

Adequate fluids are required to prevent skin dehydration and are essential when patients are on a high protein diet: requirements 30-65ml/kg/24hrs.

13 Wound photograph

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.

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: weekly or if there are any significant changes or concerns regarding the wound

Photographs of wounds can also;

- be shown to the patient in order to promote compliance with treatment
- used for evidence when there are safeguarding issues

Further guidance is available in the **SOP on Using Trust Smartphone for Wound Care.**

14 Local developments in wound care

Doncaster Clinical Commissioning Group (DCCG) has approached the Doncaster Provider Alliance and asked that it look to design and implement a new integrated wound care pathway for Doncaster patients. Over the past six months various workstreams have engaged with the Provider Alliance to develop this concept, including designing the clinical tiers of the new Wound Care Framework, and providing activity data to better understand patient demand.

The intention is that the new integrated wound care pathway for Doncaster patients is delivered from October 2019.

Appendix 16 Outline of Tiered Wounds

15 Commerical involvement in wound care

The rate and development of new products associated with wound management has led to a very confusing array of products now available to treat wounds. The selection of products for Formulary has followed a structured review process. The introduction of further products should also follow such a process.

When company representatives support educational events within the Trust they should only demonstrate products on the formulary or products following the evaluation process.

Samples of dressings are not to be used on patients unless they are part of a formal evaluation.

The conduct of company representatives is governed by the SDMA – Code of Practice for Promotion of Surgical Dressings to Healthcare Professionals

16 RESPONSIBILITIES, ACCOUNTABILITIES AND DUTIES

Refer to the home page, section 4, of the Tissue Viability and Wound Care Manual Policy

17 LINKS TO ASSOCIATED POLICIES/DOCUMENTS

First to Dress Initiative (previously the First to Dress Initiative Policy)

Bandages: Selection and Application (previously Bandages: Selection and Application Policy)

Pressure ulcers: Prevention, Detection and Treatment (previously Pressure Ulcer Policy

Lower Limb Wound Management (Previuosly Leg Ulcer policy)

18 REFERENCES/FURTHER READING

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

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

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

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

19 Appendices

Appendices are published on the Tissue Viability and Wound Care Manual's webpage where they can be downloaded.

Appendix 2 lower skin tear pathway

Appendix 7 Food First

Appendix 8 Eating, Drinking and Swallowing Awareness in Dementia

Appendix 10 Prontosan Wound Irrigation

Appendix 11 Wound Cleansing Policy

Appendix 12 Larval Debridement Therapy Pathway

Appendix 13 Doncaster Community Woundcare Formulary

Appendix 14 Wound Management guidelines with TIMES

Appendix 16 Outline of Tiered Wounds