

Appendix E: Leg Ulcer Measurement Tool

| Item/Domain | Response Categories | Score | | | | | |
|--|---|-------------------|-------|-------|-------|-------|-------|
| | | Date (mm/dd/yyyy) | | | | | |
| | | _/_/_ | _/_/_ | _/_/_ | _/_/_ | _/_/_ | _/_/_ |
| (A) CLINICIAN RATED DOMAINS | | | | | | | |
| A1. Exudate type | 0 None 1 Serosanguinous 2 Serous 3 Seropurulent 4 Purulent | | | | | | |
| A2. Exudate amount | 0 None 1 Scant 2 Small 3 Moderate 4 Copious | | | | | | |
| A3. Size (from edge of advancing border of epithelium) | (Length x Width) 0 Healed 1 <2.5 cm ² 2 2.5-5.0 cm ² 3 5.1-10.0 cm ² 4 10.1 cm ² or more | | | | | | |
| A4. Depth | Tissue Layers 0 Healed 1 Partial thickness skin loss 2 Full thickness 3 Tendon/joint capsule visible 4 Probes to bone | | | | | | |
| A5. Undermining | Greatest at ___ o'clock 0 0 cm 1 >0 – 0.4 cm 2 >0.4 – 0.9 cm 3 >0.9 – 1.4 cm 4 >1.5 cm | | | | | | |
| A6. Necrotic tissue type | 0 None 1 Loose white to yellow slough 2 Attached white to yellow slough or fibrin 3 Soft grey to black eschar 4 Hard dry black eschar | | | | | | |

| | | | | | | | |
|---|---|--|--|--|--|--|--|
| <p>A7. Necrotic tissue amount</p> | <p>0 None visible 1 1 to 25% of wound bed covered 2 26 to 50% of wound bed covered 3 51 to 75% of wound bed covered 4 76 to 100% of wound bed covered</p> | | | | | | |
| <p>A8. Granulation tissue type</p> | <p>0 Healed 1 Bright beefy red 2 Dusky pink 3 Pale 4 Absent</p> | | | | | | |
| <p>A9. Granulation tissue amount</p> | <p>0 Healed 1 76 to 100% of wound bed covered 2 51 to 75% of wound bed covered 3 26 to 50% of wound bed covered 4 1 to 25% of wound bed covered</p> | | | | | | |
| <p>A10. Edges</p> | <p>0 Healed 1 ≥50% advancing border of epithelium or indistinct borders 2 < 50% advancing border of epithelium 3 Attached, no advancing border of epithelium 4 Unattached or undermined</p> | | | | | | |
| <p>A11. Perilucer skin viability</p> <ul style="list-style-type: none"> - callus - dermatitis (pale) - maceration - induration - erythema (bright red) - purple blanchable - purple non-blanchable - skin dehydration | <p>Number of factors affected 0 None 1 One only 2 Two or three 3 Four or five 4 Six or more factors</p> | | | | | | |
| <p>A12. Leg edema type</p> | <p>0 None 1 Non-pitting or firmness 2 Pitting 3 Fibrosis or lipodermatosclerosis 4 Indurated</p> | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| A13. Leg edema location | <ul style="list-style-type: none"> 0 None 1 Localized periulcer 2 Foot, including ankle 3 To mid calf 4 To knee | | | | | | |
| A14. Assessment of bioburden | <ul style="list-style-type: none"> 0 Healed 1 Lightly colonized 2 Heavily colonized 3 Localized infection 4 Systemic infection | | | | | | |
| Total – (A) CLINICIAN RATED DOMAINS: | | | | | | | |
| (B) PATIENT (PROXY) RATED DOMAINS | | | | | | | |
| <p>B1. Pain amount (as it relates to the leg ulcer)</p> <p><i>Rate your pain, experienced in the last 24 hours, on a scale from 0 to 10, where 0 is "no pain" and 10 is the "worst pain".</i></p> | <p>Numerical rating scale (0 – 10)</p> <ul style="list-style-type: none"> 0 None 1 >0 – 2 2 >2 – 4 3 >4 – 7 4 >7 | | | | | | |
| <p>B2. Pain frequency (as it relates to the leg ulcer)</p> <p><i>"Which of the following terms best describes how often you have had pain in the last 24 hours?"</i></p> | <ul style="list-style-type: none"> 0 None 1 Occasional 2 Position dependent 3 Constant 4 Disturbs sleep | | | | | | |
| <p>B3. Quality of life (as it relates to the leg ulcer)</p> <p><i>"How do you feel about the quality of your life at the present time?"</i></p> | <ul style="list-style-type: none"> 0 Delighted 1 Satisfied 2 Mixed 3 Dissatisfied 4 Terrible | | | | | | |
| Total – (B) PATIENT (PROXY) RATED DOMAINS: | | | | | | | |
| Proxy Completed by: | | | | | | | |
| Total LUMT Score: | | | | | | | |

LUMT 2000 General Instructions

Section A CLINICIAN RATED DOMAINS *Assessments are to be done pre-debridement but after cleansing the wound. Evaluators should note the exudate type and amount on removal of dressings. Whenever possible, the time since the last dressing change should be consistent from one assessment to next.*

A1. Exudate type – Reminder: Some wound care products may change the appearance of the exudate, e.g., silver sulfadiazine or hydrocolloids.

Definitions:

- 1 Serosanguinous – thin watery pale red to pink
- 2 Serous – thin watery clear pale yellowish
- 3 Seropurulent – thin opaque
- 4 Purulent – thick opaque yellow to green with foul odour (as distinct from body or foot odour)

A2. Exudate amount – Reminder: Consider time since last dressing change.

- 0 None – ulcer healed or wound tissue dry (if wound dressings changes are not regular)
- 1 Scant – wound bed moist with dressing dry
- 2 Small – wound bed moist with some drainage on dressing
- 3 Moderate – obvious fluid in wound bed and >50% of dressing soaked
- 4 Copious – overwhelming the dressing system

A3. Size – Measure length as the longest diameter; width is perpendicular to length. Avoid diagonals. Calculate wound area as length by width. Write this in space provided and select appropriate response category.



A4. Depth – layers. Pick the most appropriate descriptor.

A5. Undermining – Place moistened rayon-tipped sterile applicator or wound probe under the edge of the wound. Advance it gently as far as it will go. Place gloved thumb on the applicator against the wound edge to mark the extent of undermining on the applicator. Holding the thumb in place, remove the applicator and measure the distance along the applicator in centimetres. Indicate the area of greatest undermining according to the face of a clock with 12 o'clock at the top of the patient.

- A6. Necrotic tissue type** – *Reminder: The wound should be thoroughly cleansed before evaluating.* Pick the predominant type of necrotic tissue, e.g., if most of the wound bed is attached fibrin with small amount of black eschar, choose attached fibrin as tissue type.
- A7. Necrotic tissue amount** of predominant type selected in A6. The sum of the percentages in A7 and A9 may be less than but should not exceed 100%.
- A8. Granulation tissue type** – Choose predominant type of granulation tissue.
- A9. Granulation tissue amount** – (The sum of the percentages in A7 and A9 may be less than but should not exceed 100%.) The percentage of granulation tissue refers only to the non-epithelialized (open) portion of the wound. The advancing border of epithelium is not considered part of the wound surface.

- A10. Edges** – Definition: Indistinct borders - where you would not be able to trace the wound edge.
- 1 More than half of advancing borders may be indistinct because most of wound is epithelializing.

Advancing wound edge is 

- 2 Less than half of the wound edge is advancing (the process of epidermal resurfacing appears smooth and shiny).

- 3 Attached, no advancing border – unable to probe. Looks like 

- 4 Unattached wound edge is  undermined wound edge is 

- A11. Periwound skin viability** – Select the following items that are present; count the number selected; then use this total to determine appropriate response category.

Definitions: Callus – thick dry epidermis

Scaling dermatitis – scaling red skin which may be weeping

Maceration – wet white opaque skin

Induration – feels firmer than surrounding skin when pressed

Erythema – skin redness (bright red)

A12. Leg edema type – Indicate the *worst* edema type located anywhere on leg.

Definition: lipodermatosclerosis – waxy white firm tissue.

A13. Leg edema location – Indicate the most proximal location of *any* type of edema. Clinical example: pitting edema ankles with non-pitting edema to mid calf: For A10, leg edema type = 2 ‘pitting’, A11, leg edema location = 3 to ‘mid calf’.

A14 Assessment of bioburden

- 1 Lightly colonized: small amount of serous- type exudate.
- 2 Heavily colonized: large amount of seropurulent drainage with foul odour and no other cardinal signs of inflammation.
- 3 Localized infection: large amount of seropurulent drainage with foul odour and either induration, erythema, warmth, or pain.
- 4 Systemic infection: advancing cellulitis or osteomyelitis.

Section B PATIENT (PROXY) RATED DOMAINS *Read the questions “as they are” to the patient. It is important to qualify that the questions refer to the last 24 hours. If the patient is unable to understand the questions due to cognition or language deficits, section B should not be completed or it may be completed by a proxy only if the proxy knows the patient well and has been with the patient for most of the last 24 hours. The same person should provide proxy information for each assessment; otherwise do not complete section B.*

B1. Pain amount as it relates to the leg ulcer in the last 24 hours. Determine the rating based on a numerical rating scale ranging from 0 - 10, then place response in appropriate category.

B2. Pain frequency as it relates to the leg ulcer in the last 24 hours. How often patient experienced pain in the last 24 hours.

B3. Quality of life as it relates to the leg ulcer in the last 24 hours.

© Woodbury, Houghton, Campbell, Keast, 2000

Reprinted with permission from Dr. M. Gail Woodbury, Investigator, Lawson Health Research Institute, London, Ontario, Canada.