DEFINITION

Digital planimetry, is a measurement tool that provides a visible record of the dimensions of a wound. It enables the measurement of surface area, length, width, and amount of viable and non viable tissue. It can also be used to calculate the % surface area change, from the last wound area measurement.

SCOPE

District Nursing Services, Palliative Care Services and Public Residential Aged Care Services

CLINICAL ALERT

Tracing Grid and depth measurement stick

- Ensure that a fine point permanent marker pen is used to trace the wound. Not all pens are suitable to use on the grid.
- Use minimal pressure when using a pen to trace the wound edge
- Only insert the foam tipped end of the depth measurement stick, into the wound
- Rest the measurement stick tip on the wound bed, using minimal pressure. Care should be taken not to depress the wound bed
- Ensure that the top of the grid points toward the anatomical top of the wound (the head)
- Ensure that the patient details, wound position and date are documented in the relevant sections, on the grid

EQUIPMENT

- Visitrak Digital Tablet
- Visitrak Grid
- Visitrak Depth Stick
- Fine tipped permanent marker pen

PROCEDURE

Wound measurement should occur on a regular basis as part of the ongoing assessment and evaluation of wound care provided. It is recommended that

- Acute wounds are measured weekly – fortnightly (as per Wound Management policy)
- Chronic wounds are measured monthly

SYMBOLS GUIDE

- Wound area in squared centimetres
- Length
- Width
- % change in wound area
- % non – viable tissue within the wound
- Wound depth in centimetre (using Visitrak Depth)
To get started – Using the Visitrak tablet

1. Insert batteries.
2. Switch on.
3. Remove white backing paper from Visitrak Grid.
4. Place the grid area over the wound. Position the top of the grid toward the patients head.
5. Trace around the edge of the wound using a fine point permanent marker.
6. If the wound is too large to fit within the grid area of one tracing grid, overlap two grids and trace the wound across both grids.
7. Remove the contaminated wound contact layer from the tracing grid and dispose as clinical waste.
8. Place the tracing grid on the tablet – placing the holes over the pegs. If available, place the coversheet on top of the tracing grid and secure over the pegs on tablet.
9. Place the stylus at a point on the wound tracing and press the switch on the stylus and wait until the tracing symbol appears in the display.

10. Trace around the wound outline, without lifting the stylus.
11. The tablet will “beep” When the tracing is complete, and display the area measurement on the digital display.
12. If applicable, place the Visitrak depth into the deepest part of the wound and measure the depth using the scale on the stick.
To measure the % change in the wound area

After you have obtained the wound area measurement for the current wound – You can measure the % change in the wound surface area, from the previous wound.

Press the symbol indicated and then use the key pad to enter the previous wound’s measurement.

1. Press here then use the keypad to enter the previous area.

2. Press ‘OK’

3. The display will show the % change in area:

(eg: this wound has decreased in size by 30%)
To Calculate larger wounds using more than one grid

After you have obtained the wound area measurement for the current wound you can calculate the surface area of larger wounds, using more than one grid.

1. Press here then measure the second wound by following steps 9 & 10 overleaf.

The tablet will beep and the total surface area of the wound will be displayed.

2. When the processing is complete the unit will beep and the display will show the total area in cm².

To find the width: Press the symbol indicated
To find the length: Press the symbol indicated

Press here

To cancel a mistake or reset the process
If you make a mistake, quickly press the C symbol. To reset it keep “C” pressed.

MAINTENANCE

Replacing the Stylus Nib
- Insert the nib of the stylus into the gap of the metal ring
- Squeeze the metal ring to secure the nib and pull to remove
- Place a new nib directly into the tip of the stylus and press firmly to secure

Storage
- Ensure the Visitrak Digital stylus is always returned to the tablet recess when not in use

Cleaning
Clean the Visitrak tablet, stylus and coversheet as per points listed below:
- Wipe all device surfaces with 70% Isopropyl Alcohol Impregnated wipes eg: Rediwipe ®
- Do not immerse any part of the Visitrak components in water
- Do not sterilise the unit
- Do not use plastic solvents or abrasive cleaners
Title: Visitrak Digital Wound Measurement

Department: District Nursing Services; Public Sector Residential Aged Care Services

TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>You notice</th>
<th>Possible causes</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The function symbol on the tracing grid has not been touched but the unit display has not changed.</td>
<td>Function symbol touched instead of the box below the function symbol.</td>
<td>Touch the box underneath the appropriate function symbol on the tracing grid using the stylus. Do not press the side switch on the stylus.</td>
</tr>
<tr>
<td>Area measurement does not appear in unit display. Unit double keys during after tracing is complete and unit display flashes previous area reading.</td>
<td>Incomplete tracing on digital tablet, which may be due to:</td>
<td>Fill the holes in the tracing grid over the page on VISITRAK Digital. If available, place the cover plate on top of the tracing grid and secure over the page on VISITRAK Digital. Hold the cover plate/tracing grid or VISITRAK Digital surfacing the uncapped stylus. Press the stylus, side switch in close proximity to the tracing grid, and place the stylus at the start point of the tracing to activate the tracing symbol on the display. Trace the wound outline on the grid, whilst ensuring that minimum pressure is applied to the grid by the stylus. Do not lift the stylus while tracing and remain within the grid area. Start and finish the tracing at the same point. You will have an audible beep to indicate a successful trace.</td>
</tr>
<tr>
<td>No length or width results available.</td>
<td>Multiple tracing grids have been added together. The length and width parameters cannot be displayed following these functions.</td>
<td>For large wound areas requiring multiple tracing grids, only the wound area can be measured.</td>
</tr>
<tr>
<td>The display screen shows the cursor moving across the screen.</td>
<td>The digital unit has an automatic power save (sleep) function if not touched after 3 minutes with the stylus.</td>
<td>Touch the tracing grid with the stylus and the unit will reactivate. Proceed with the next function.</td>
</tr>
<tr>
<td>The battery symbol flashes on and off and subsequently remains on permanently. The unit double keys.</td>
<td>Battery power is low that there is not enough energy to power up the unit.</td>
<td>Now batteries should be purchased and inserted into the unit.</td>
</tr>
</tbody>
</table>

EXPECTED OUTCOME

- Wound healing will be optimised by effective and systematic monitoring of wound measurements.
- Early identification of non responding wounds will ensure that treatment regimes can be re-evaluated and more appropriate interventions instigated, in a timely manner.

REFERENCES


AUTHOR

Lesley Stewart - Barwon South West Wound Management CNC
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VALIDATION

Gippsland Regional Wound Management Steering Committee