BANDAGES: SELECTION AND APPLICATION POLICY

<table>
<thead>
<tr>
<th>DOCUMENT CONTROL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version: 2</td>
</tr>
<tr>
<td>Ratified by: Clinical Quality Standards Group</td>
</tr>
<tr>
<td>Date ratified: 4 August 2015</td>
</tr>
<tr>
<td>Name of originator/author: Clinical Nurse Specialist in Tissue Viability</td>
</tr>
<tr>
<td>Name of responsible committee/individual: Clinical Quality Standards Group</td>
</tr>
<tr>
<td>Date issued: 26 August 2015</td>
</tr>
<tr>
<td>Review date: August 2018</td>
</tr>
<tr>
<td>Target Audience: All Clinical staff</td>
</tr>
</tbody>
</table>
# CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>3</td>
</tr>
<tr>
<td>SCOPE</td>
<td>3</td>
</tr>
<tr>
<td>RESPONSIBILITIES, ACCOUNTABILITIES AND DUTIES</td>
<td>3</td>
</tr>
<tr>
<td>The Trust</td>
<td>3</td>
</tr>
<tr>
<td>The Chief Executive</td>
<td>4</td>
</tr>
<tr>
<td>Directors and Senior Managers</td>
<td>4</td>
</tr>
<tr>
<td>Tissue Viability Nurse Specialist</td>
<td>4</td>
</tr>
<tr>
<td>Matrons and Clinical Team Leaders</td>
<td>4</td>
</tr>
<tr>
<td>Registered Healthcare Professional</td>
<td>4</td>
</tr>
<tr>
<td>Health Care Assistants</td>
<td>5</td>
</tr>
<tr>
<td>All Staff Members</td>
<td>5</td>
</tr>
<tr>
<td>PROCEDURE/IMPLEMENTATION</td>
<td>5</td>
</tr>
<tr>
<td>Determine the purpose of bandage</td>
<td>5</td>
</tr>
<tr>
<td>Determine the length of time the bandage is require to stay insitu</td>
<td>5</td>
</tr>
<tr>
<td>Bandage Classification</td>
<td>5</td>
</tr>
<tr>
<td>Class 1: Lightweight conforming bandage</td>
<td>5</td>
</tr>
<tr>
<td>Class 2: Light support bandage</td>
<td>6</td>
</tr>
<tr>
<td>Class 3: Compression bandages</td>
<td>6</td>
</tr>
<tr>
<td>Tubular Bandages</td>
<td>7</td>
</tr>
<tr>
<td>Sub-compression Wadding Bandage</td>
<td>7</td>
</tr>
<tr>
<td>Farrow wraps</td>
<td>7</td>
</tr>
<tr>
<td>Application Technique</td>
<td>7</td>
</tr>
<tr>
<td>Simple Spiral</td>
<td>7</td>
</tr>
<tr>
<td>Figure of Eight Spiral</td>
<td>8</td>
</tr>
<tr>
<td>Tension Guide Application</td>
<td>10</td>
</tr>
<tr>
<td>Short Stretch</td>
<td>10</td>
</tr>
<tr>
<td>Medicated Bandage</td>
<td>11</td>
</tr>
<tr>
<td>Good Practice Guidance for Bandage Applications</td>
<td>11</td>
</tr>
<tr>
<td>Compression Monitoring Form - Appendix 1</td>
<td>12</td>
</tr>
<tr>
<td>Bandage Evaluation</td>
<td>13</td>
</tr>
<tr>
<td>TRAINING IMPLICATIONS</td>
<td>13</td>
</tr>
<tr>
<td>MONITORING ARRANGEMENTS</td>
<td>13</td>
</tr>
<tr>
<td>EQUALITY IMPACT ASSESSMENT</td>
<td>14</td>
</tr>
<tr>
<td>Privacy, Dignity and Respect</td>
<td>14</td>
</tr>
<tr>
<td>Mental Capacity Act</td>
<td>14</td>
</tr>
<tr>
<td>LINK TO OTHER PROCEDURAL DOCUMENTS</td>
<td>14</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>15</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>15</td>
</tr>
<tr>
<td>Appendix 1 Farrow Wraps</td>
<td>16</td>
</tr>
<tr>
<td>Appendix 2 Monitoring application of Compression</td>
<td>18</td>
</tr>
</tbody>
</table>
1. **INTRODUCTION**

Bandages come in a variety of sizes, classifications and provide a number of functions from simple retention to graduated compression systems. It is important that the selection of the bandage is suitable for the application required.

2. **PURPOSE**

The purpose of this policy is to:-

- To set out the framework for the selection of an appropriate bandaging system and competent application.

- To prevent bandage trauma.

- This policy recognises the importance of consistent individualised care and the need to include the latest evidence based techniques and wound management products and bandages that are clinically effective (NMC 2008).

- This policy recognises the role of Healthcare Assistants who have received formal training and are competent to apply therapeutic bandaging regimes under the delegated supervision of a registered nurse.

3. **SCOPE**

This policy applies to those members of staff that are directly employed within the Trust. For those staff covered by a letter of authority/honorary contract or work experience this policy is also applicable whilst undertaking duties on behalf of the Trust or working on Trust premises and forms part of their arrangements with the Trust. As part of good employment practice, agency workers are also required to abide by the Trust policies and procedures, as appropriate, to ensure their health, safety and welfare whilst undertaking work for the Trust.

This policy is intended for use predominantly in the community, Tickhill Road Hospital site in-patient services and in-patient services for older people. However, it may also be relevant for all other In-patient services and the need will be determined by the physical assessment on admission, in line with the Policy for the Physical Assessment, Examination and Ongoing Care of In-patient Service Users.

In the North Lincolnshire and Rotherham localities tissue viability and wound care services is provided by North Lincolnshire and Goole NHS Foundation Trust and Rotherham NHS Foundation Trust. The tissue viability and wound care services provided are a combined hospital and community service.

4. **RESPONSIBILITIES, ACCOUNTABILITIES AND DUTIES**

4.1 **The Trust**

The Trust has responsibility to ensure that a comprehensive policy for bandage application is developed, agreed and reviewed in accordance with best practice
4.2 Chief Executive

The Chief Executive has responsibility for there being a structured approach to procedural document development and management in place. Although responsibility for procedural document development may be delegated to other officers, accountability remains with the Chief Executive.

4.3 Directors and Senior Managers

Will make arrangements for the effective implementation and monitoring of the policy.

4.4 Tissue Viability Nurse Specialist and Tissue Viability and Lymphoedema Services

These staff are employed within RDaSH. Their role is:

- To provide expert professional advice and education on the prevention and control of infection to other professionals, multi-disciplinary groups, patients and carers.
- To lead in the investigation of identified breaches of Tissue Viability
- To advise on treatments and interventions, delegating responsibility to Trust staff as appropriate.
- To give advice on complex issues relating to Tissue Viability and report findings to the relevant Business Divisions.
- To report any breaches in policy compliance through the IR1 system and to the Health, Safety and Security Forum.

4.5 Matrons and Clinical Team Leaders

Modern Matrons and Clinical Leads will be responsible for:

- Raising awareness of the policy and for its implementation and monitoring adherence to it.
- Will identify training needs and ensure staff are appropriately trained in bandage application and will record all training.
- Will incorporate bandage application into staff performance review and the knowledge and skills framework relevant to their practice area
- Will ensure compliance with the Audit requirements of the policy.

4.6 Registered Healthcare Professional

Qualified nursing staff will be competent in and responsible for the application of bandages relevant to their practice area. The qualified nurse has a duty to ensure that any care delegated to the Health care assistant is in line with the training the Health care assistant has received and the competencies the Health care assistant has achieved and demonstrated. The qualified nurse will remain accountable for the care delivered and will continue to reassess the bandages regularly.
4.7 Health Care Assistants

Health care assistants may contribute to application of a bandage regime where competencies have been completed under the supervision of a registered nurse.

4.8 All staff members

- All staff have a responsibility to work on in line with Trust procedural documents and should:
- Be aware of how to access them
- Be aware of those which are relevant to their work
- Act in accordance with them
- Attend any training which is offered in relation to them
- Report to their manager any issues affecting compliance with them in other that these may be taken in to account.

5. PROCEDURE/IMPLEMENTATION

5.1 Determine the purpose of bandage:

- Retention of dressing taking into account the location and size of the wound.
- Support limb after soft tissue injury.
- Support joint after strain.
- Compression therapy.

5.2 Determine the length of time the bandage is require to stay insitu.

Determine the width of the bandage to be applied:

- 2.5cm bandage for digits
- 5.0cm bandage for hands
- 5.0cm – 7.5cm bandages for head/ears/eyes
- 7.5cm – 10cm bandage for arms
- 10cm bandage for lower legs
- 10cm – 15cm bandage for thigh/trunk

Ensure the bandage bulk is compatible with maximum comfort, mobility and protection.

5.3 Bandage Classification

According to the structure and performance bandages are allocated classifications

5.3.1 Class 1: Lightweight conforming bandage

These bandages are used for dressing retention, with the aim of keeping the dressing close to the wound without inhibiting movement or restricting blood flow and not apply compression e.g. K band (Parema).
5.3.2 Class 2: Light support bandage

These bandages are used to provide support for mild sprains and joints and used in the prevention of oedema they are not suitable for applying compression e.g. K Lite (Parema) Crepe, Cotton short stretch e.g. Actico (Activa).

5.3.3 Class 3: Compression bandages

These bandages are used to provide the high compression needed for the management of gross varicose, post-thrombotic venous insufficiency, venous leg ulcers and gross oedema.

NB – compression should only be applied when suitably of circulation has been determined.

- Class 3a: Light compression
  Able to provide and maintain low level of pressure up to 14-17mmHg at the ankle. Suitable for the management of superficial or early varies and varicosis formed during pregnancy e.g. K Plus (Parema) Elset (SSL), equivalent to class 1 compression hosiery light support.

- Class 3B: Cohesive bandage
  Able to apply in the order 18-24mmHg at the ankle. Suitable for treatment of varicosis formed during pregnancy, varices of medium severity, prevention and treatment of ulcer and the control of mild oedema e.g. Ko-Flex (3M) Ko-Flex (Parema). Equivalent to class 2 compression hosiery medium support.

- Class 3c: High compression
  Able to apply in order of 40mmHg. Suitable for the management of gross varices, management of leg ulcers and gross oedema e.g. Tensopress (Smith & Nephew) Surepress (ConvaTec). Equivalent to class 3 compression hosiery strong support.

- Class 3d: Extra high compression
  These bandages are capable of applying pressure in the order of 50mmHg. Suitable for the management of gross leg oedema e.g. blue line bandage.

- Short stretch bandage

Classified as Class 2 support, not compression bandage. Made from 100% cotton and inelastic giving high sub-bandage pressures on exercise and low resting pressure. Suitable for patients with latex allergy e.g. Actico (Activa) Comprilan.
5.3.4 Tubular Bandages

Tubular bandages are available in different forms, according to the function required of them.

- Used under orthopaedic casts.
- Protecting areas to which cream or ointments (other than those containing potent corticosteroids) have been applied.
- Retaining dressings in difficult parts of the body e.g. abdomen.

5.3.5 Sub-compression Wadding Bandage

- Absorbent padding and protection to bony prominences and gives shape for application of compression bandages e.g. Soffban, Velband.
- Apply additional layers for absorbent padding until ankle circumference measures at least 18cm.
- For legs presenting as inverted champagne bottle shaped limb, apply layers of absorbent padding to the narrow part of the leg to make the leg more cone shaped.

5.3.6 Farrow wraps

- Farrow wraps are short stretch compression bands secured using Velcro. They are applied at near end stretch to achieve graduated compression.
- Farrow wraps provide an alternative to compression hosiery for patients who find bandages and garment difficult to tolerate.
- Patients require a vascular assessment either Doppler or Vascular Assist to evidence arterial insufficiency has been excluded.

Appendix 1 Making the case for Farrow Wraps

5.4 Application Technique

5.4.1 Simple Spiral

All bandages are applied in a simple spiral with 50% overlap unless stated otherwise by the manufacturers.

- The first turn, starting at the base of the toes, encircles the ball of the foot and anchors the bandage in place.
- The next turn takes the bandage to the point of the heel and back to the front of the foot, ready to cover the arch of the foot in turn 3.
- The third turn encircles the rest of the foot and returns to the Achilles tendon.
from where the straight part of the leg can be approached.

- The bandage is then applied by unrolling the bandage to a length suitable for wrapping around the leg in a simple spiral, extending it to the required extension and then placing it on the leg so that 50% of the previous turn is covered.

- Bandage is passed from one hand to the other to achieve an even extension and overlap up the leg as far as the tibial plateau, where the bandage is finished so that the knee joint is not impeded. In obese patients the knee joint may be difficult to locate and it may help to ask the patient to bend the knee in order to determine its position.

- Any excessive bandage should be cut off rather than wound around the legs, since extra layers can cause a tourniquet effect.

- Pins or metal fasteners should not be used to secure the bandage due to the possibility that they may damage the skin, either the bandaged leg or the un-bandaged leg. Adhesive tape should be used to secure the bandage effectively.

5.4.2 Figure of Eight Spiral

For figure of eight application the foot is covered in the same way as for the spiral bandage they proceed up the leg with the first turn of the bandage above the ankle applied up the lateral aspect of the leg, straight along the back of the leg and then downwards along the medial aspect. The next turn along the back of the leg is offset by half a bandage width and following the turns is placed accordingly. The pattern repeats up the leg to the tibial plateau.

<table>
<thead>
<tr>
<th>Ankle Circumference</th>
<th>Bandage Regime</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 18cm/champagne bottle limb</td>
<td>2 or more layers of wool padding the narrow part of the leg to make the leg more cone shaped and ankle measures 18cm (apply in simple spiral at 50% overlay)</td>
<td>Laplace's Law states that the sub-bandage pressure is inversely proportional to the circumference of the limb. Therefore it is necessary to measure the ankle circumference in order to ensure that appropriate therapeutic compression is achieved in relation to the size of the patients’ ankle. Healing may not be achieved if an inappropriate bandaging is used.</td>
</tr>
<tr>
<td></td>
<td>1 light support bandage (Class 2) K-lite (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 light compression (Class 3a) K-Plus (apply in figure of eight spiral at 50% extension and 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 cohesive bandage (Class 3b) Ko-Flex (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td>Up to 18cm</td>
<td>2 or more layers of wool padding until ankle measures 18cm (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td>Ankle Circumference</td>
<td>Bandage Regime</td>
<td>Rationale</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>50% overlay)</td>
<td>regime is used. Conversely on smaller limbs, trauma can occur if the size is not considered when applying multi-layer compression (RCN Guidelines 2006).</td>
</tr>
<tr>
<td></td>
<td>1 light support bandage (Class 2) K-lite (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 light compression (Class 3a) K-Plus (apply in figure of eight spiral at 50% extension and 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 cohesive bandage (Class 3b) Ko-Flex (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td>18 – 25cm</td>
<td>1 layer of wool padding (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 light support bandage (Class 2) K-Lite (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 light compression (Class 3a) K-Plus (apply in figure of eight spiral at 50% extension and 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 cohesive bandage (Class 3b) Ko-Flex (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td>25 – 30 cm</td>
<td>1 layer of wool padding (apply in simple spiral at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 high compression (Class 3c) Tensopress (apply in simple spiral using tension guide for overlap at 50% overlay)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 cohesive bandage (Class 3b) Ko-Flex (apply in simple spiral at 50% overlap)</td>
<td></td>
</tr>
<tr>
<td>Greater than 30cm</td>
<td>1 layer of wool padding (apply in simple spiral at 50% overlap)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 light compression (Class 3a) K-Plus (apply in figure of eight spiral at 50% extension and 50% overlap)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 high compression (Class 3c) Tensopress (apply in simple spiral using tension guide for overlap at 50% overlap)</td>
<td></td>
</tr>
</tbody>
</table>
Bandage Regime for venous ulcers with ABPI > 0.8 with application of layer bandages as per ankle circumferences

<table>
<thead>
<tr>
<th>Ankle Circumference</th>
<th>Bandage Regime</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 cohesive bandage (Class 3b) Ko-Flex (apply in simple spiral at 50% overlay)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Compression bandage systems should not be changed more than weekly. Reasons for renewing the bandages more frequently can include:-
  - Patient reports discomfort
  - Slippage of the bandages
  - Strike through of exudates
- Both the primary dressing and padding wool should be sufficient to manage the exudates. More frequent changes expose the wound increasing the risk of infection.

5.4.3 Tension Guide Application

- For class 3c high compression bandage, ensure therapeutic levels of compression use the tension guides:-
  - Surpress – ankles 18cm – 26cm the small rectangular extension indicator becomes square, ankles over 26cm the large rectangular indicator becomes square
  - Setopress – ankles 18cm – 26cm the green rectangles to squares, ankles over 26cm brown rectangles to squares.

- Apply primary dressing as per wound management guideline.
- Apply absorbent padding in a loose simple spiral from base of toe to tibial plateau.
- Apply high compression bandage at 50% overlap with 50% extensive

5.4.4 Short Stretch

- Short stretch bandages are applied at full stretch over padding, which protects areas of high risk of pressure.
- Apply primary dressings as per wound management guidelines.
- Apply absorbent padding in loose simple spiral from base of toe to tibial plateau.
- Short stretch bandages are applied at full stretch over absorbent padding, holding the bandage close, start at the base of the toes and bandage up the
leg following the contours of the leg up to the tibial plateau.

- For ankles measure over 28cm apply a second short stretch bandage from ankle to tibial plateau in a simple spiral at full stretch in the opposite direction to the first bandage layer.

- Bandages should be applied in a simple spiral, with 50% overlap unless otherwise instructed in manufacturers guidelines.

### 5.4.5 Medicated Bandage

Cotton fabric bandaged impregnated with medicated paste for treatment for certain conditions.

- Zinc impregnated bandage – general purpose treatment for leg ulcers, venous stasis and varicose eczema e.g. Viscopaste (S&N).
- Icthammol impregnated bandage – general purpose treatment for phlebitis areas and sensitive skin surrounding leg ulcers e.g. Icthopaste

**Application of Medicated Bandages**

- The bandage is applied from toe to knee
- Two methods of application
  1) apply in strips with cut edges at side of leg – ensuring they overlap by at least 5cm
  2) at every turn the bandage should be folded back on itself in pleats at the side of the leg
- Bandage should be smoothed and moulded around the leg.
- Once the paste bandage has been applied the leg should be covered by layer of wool padding and a retention bandage to prevent soiling to clothes or compression if indicated.
- After the first application nurse should check the patient after 24 hours to ensure there is no sensitivity reaction

### 5.4.6 Good Practice Guidance for Bandage Applications

- Bandages should be changed weekly or as frequently as exudate levels dictate.
- Bandages should only be applied by appropriately trained staff.
- Examination of limb checking for distortion of the natural limb contour or bony prominences.

When bandaging legs:-

- Measure ankle circumference to establish bandage regime.
- Bandage placement from base of toes to level of tibial tuberosity.
- Flex the foot slightly to avoid excessive layer around the ankle – e.g. ask patient to point their toes towards their nose throughout the application.
- Use tension guides lines or symbols to ensure bandage extension at correct
tension.
- Patients wearing bandages should be encouraged to take exercise and when resting high elevation of legs.

Recognition of impaired circulation initially:-
- Swollen or congested limbs
- Blue skin with prominent veins
- Feeling of painful distension

Recognition of impaired circulation later:-
- Pale, waxy skin and cold numbness
- Tingling followed by deep pain
- Inability to move fingers or toes

5.4.7 Compression monitoring form Appendix 2

Check the circulation by applying light digital pressure on the nail or skin until it is pale then release the pressure. If the colour does not return or returns slowly indicates the bandage is too tight. Loosen the tight bandage by unrolling until warmth and colour returns to extremities.

Bandages should be checked 24 hours after application. Graduated compression will reduce oedema and it is often necessary to re-apply the bandages 24 hours after first application.

In the community the patient must be left with a contact telephone number. If the patient finds the bandages are causing circulation problems or they appear to tight the patient should contact the District Nurse. The patient should remove the compression layers of bandages – top layer for 3 layer systems, top 2 layers in a 4 layer system – and sit with legs elevated.

Supplies of dressing pads and retention bandage (Class 1) K-band should be left with the patient / carer so an outer layer can be applied to provide a physical barrier if strikethrough until the Nurse/District Nurse can attend to re-new the complete bandage regime.

For leg ulceration with differential diagnosis of moderate arterial disease when reduced compression is used, in the absence of medical contraindications and under monitor. If multi-layer bandage regime is appropriate the top layer of cohesive bandage (Class 3b) Ko-Flex is omitted leaving figure of eight application of light compression (Class 3a) K-Lite the top layer.

If there are issues with the bandage regime staying in-situ the 3rd layer light compression (Class 3a) K-plus is omitted and cohesive bandage (Class 3b) Ko-Flex is the top bandage layer in simple spiral application.

If the patient requests that the bandage regime is complainant with wearing their regular footwear then the wool padding can be applied to protect the vulnerable areas of the leg – around the maleolus, dorsal of foot and shin in preference to full toe to knee application.
If short stretch bandage regime is the appropriate bandage regime for management of chronic oedema with or without ulceration the wool padding can be applied to in simple spiral toe to knee or to protect the vulnerable areas of the leg.

5.4.8 Bandage Evaluation

Evaluate performance of bandage application:-

- Patient reports no discomfort
- Bandages have stayed in place
- On removal of bandages there is no oedema, redness or ridging noted and no breaks in the skin.

Patients unable to tolerate compression:-

- Reconsider diagnosis
- Check for infection
- Consider compression hosiery instead of bandaging.

6 TRAINING IMPLICATIONS

- Education is provided to support this document locally by the Clinical Nurse Specialist in Tissue Viability and supported by Tissue Viability Outreach Service team or Community Practice Educator team or externally through courses in partnership with local universities.

- It is each person’s professional responsibility to ensure their knowledge is updated accordingly as part of his/her personal professional development plan. Training should be updated on at least 3 yearly basis.

- Nursing staff should ensure and document they are competent to undertake bandaging regimes.

7. MONITORING ARRANGEMENTS

<table>
<thead>
<tr>
<th>Area for monitoring</th>
<th>How</th>
<th>Who by</th>
<th>Reported to</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safeguard IR1 Reporting of incidents regarding woundcare/Bandaging</td>
<td>Number of IR1 reports</td>
<td>Matrons Nursing Staff CNS in Tissue Viability</td>
<td>Business Divisions</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>
8. EQUALITY IMPACT ASSESSMENT SCREENING

The completed Equality Impact Assessment for this Policy has been published on the Equality and Diversity webpage of the RDaSH website [click here](#).

8.1 Privacy, Dignity and Respect

| The NHS Constitution states that all patients should feel that their privacy and dignity are respected while they are in hospital. High Quality Care for All (2008), Lord Darzi's review of the NHS, identifies the need to organize care around the individual, 'not just clinically but in terms of dignity and respect'. | Indicate how this will be met: There is no requirement for additional consideration to be given with regard to privacy, dignity or respect. |

As a consequence the Trust is required to articulate its intent to deliver care with privacy and dignity that treats all service users with respect. Therefore, all procedural documents will be considered, if relevant, to reflect the requirement to treat everyone with privacy, dignity and respect, (when appropriate this should also include how same sex accommodation is provided).

8.2 Mental Capacity Act

Central to any aspect of care delivered to adults and young people aged 16 years or over will be the consideration of the individuals capacity to participate in the decision making process. Consequently, no intervention should be carried out without either the individuals informed consent, or the powers included in a legal framework, or by order of the Court.

Therefore, the Trust is required to make sure that all staff working with individuals who use our service are familiar with the provisions within the Mental Capacity Act. For this reason all procedural documents will be considered, if relevant to reflect the provisions of the Mental Capacity Act 2005 to ensure that the interests of an individual whose capacity is in question can continue to make as many decisions for themselves as possible.

| Indicate How This Will Be Achieved. | All individuals involved in the implementation of this policy should do so in accordance with the Guiding Principles of the Mental Capacity Act 2005. (Section 1) |

9. LINKS TO OTHER TRUST PROCEDURAL DOCUMENTS

This policy should be read in conjunction with the following Trust Policies:-

- The most recent edition of the Royal Marsden NHS Trust Manual of Clinical Procedures
- Wound Management Policy
- Leg Ulcer Policy
- Wound Management Guidelines
- Doncaster District Dressing Formulary
10. REFERENCES

- Callum MJ, (1994) the nursing management of leg ulcers in the community: a critical review of research Liverpool. University of Liverpool, Department of Nursing.
- Cullum N, etal (2001) Compression for venous leg ulcers Chochrane Database of Systematic Reviews Issue 2
- Feber K (2003) how effective is training in compression bandaging techniques. Br J community nurse 8(20) pp80-4
- Lay-Flurrie (2011) Venous ulceration and graduated compression.BJNVol20 No15S4 –S8
- NICE (2012) Lower limb peripheral arterial disease diagnosis and management CG 147 NICE London
- • Smith L (2012) Identifying and managing peripheral arterial disease Nursing times 108 (43) 12 -14

11. APPENDICES

Appendix 1  Farrow Wraps
Appendix 2  Monitoring application of Compression
Appendix 1

CATEGOR Y: COMPRESSION
FARROWWRAP®

INDICATIONS
FarrowWraps are easy-to-apply compression garments available in a range of LITE, STRONG and CLASSIC fabrics for patients with mild, moderate and severe lower limb lymphoedema.
Secondary indications include:
- Inability to tolerate compression bandaging or hosiery
- Abnormal/distorted limb shapes
- Inability to apply compression hosiery (e.g. due to weak hand strength, back problems or obesity)
- Fluctuations in limb swelling
- Stubborn or rebound oedema
- Fragile skin at risk of breakdown.

PRECAUTIONS AND CONTRAINDICATIONS
A vascular assessment should be undertaken prior to application to exclude moderate to severe arterial insufficiency, uncontrolled heart failure and severe peripheral neuropathy. FarrowWrap may be used with caution in patients with skin infection (but not advancing cellulitis), mild to moderate arterial disease and history of thrombosis. It should not be worn without appropriate foot compression.

PRODUCT DESIGN
Farrow Wraps comprise a protective liner and multiple, overlapping bands of short-stretch inelastic material interconnected by a spine. They are designed to be worn with a liner; padding can be added for patients requiring extra skin protection. Both layers are breathable, washable and reusable, with a guarantee of 6 months. Where tolerated by the patient, the optimum level of pressure should be applied in order to achieve and maintain volume reduction:
- CLASSIC: 30-40mmHg (moderate to strong compression)
- STRONG: 30-40mmHg (moderate to strong compression)
- LITE: 20-30mmHg (mild to moderate compression)

In general, the stiffer the fabric, the more effective it is at reducing oedema. The CLASSIC system is robust and rigid, while the LITE system is thinner, cooler to wear and may be more suitable for elderly or palliative care patients. The STRONG system is suitable for those patients who require stronger compression but cannot tolerate or do not need the rigidity of the CLASSIC system.

Figure 1: Application of FarrowWrap

HOW DOES FARROWWRAP WORK?
The short-stretch compression bands are secured using Velcro, with the patient applying the wrap at near-end stretch to achieve graduated compression (Fig 1).

FarrowWrap uses short-stretch technology to create a semi-rigid compression system. This provides the necessary resistance during exercise to create pressure fluctuations in the lower limb, with high working pressures and low resting pressures.

These fluctuations can enhance calf muscle pump activity and improve lymphatic and venous return, reduce swelling and prevent re-accumulation of lymphoedematosus fluid in the lower limb (Wigg, 2012). It can be worn during the day and/or at night.

SAFETY AND TOLERABILITY
FarrowWraps are well tolerated by patients who can easily modify the amount of compression applied, tightening the Velcro straps throughout the day as required as part of their self-management. There have been no reported cases of allergy to the materials used.

CLINICAL EVIDENCE FOR USE
A number of small-scale studies and case reports have shown that FarrowWrap:
- Achieves therapeutic levels of compression compared to conventional short-stretch bandages (Davey and Mayrovitz, 2006)
- Reduces limb swelling and maintains volume reduction, with potential to reduce need for repeated courses of decongestive lymphatic therapy (Lawrence, 2008; Wigg, 2012)
- Is comfortable and easy to apply (Lawrence, 2008; Wigg, 2012)
- Minimises garment slippage and conforms to limb shape (Wigg, 2012)
- Provides an alternative to compression hosiery in patients who have a history of non-concordance with compression (Smith et al, 2005).

COST
FarrowWrap compression garments are available on Drug Tariff. The costs are similar whether ordering STRONG, CLASSIC or LITE systems and for all limb sizes and lengths. The footpiece, legpiece and thighpiece together cost approximately £292.50–£295 (excluding VAT); items can be purchased separately.

References
Wigg I (2012). Chronic Oedema 4: 522-29
http://bit.ly/1Ybh7nv
For further information on FarrowWrap. www.healthcare.farrowwrap.php

Explanation of how to use this guide: This document can be used to make the case for implementing effective prevention and management measures and may be supported by data from your own care setting. As well as economic impact, it is important to know the impact of interventions on patient quality of life and outcomes.
**Making the Case**

**Category: Compression**

**FarrowWrap®**

**Compression and Lymphoedema**

Lymphoedema is a chronic disease needing life-long treatment comprising compression, good skin care, exercise and rehabilitation. Patients with lymphoedema experience greater levels of functional impairment, poorer psychological adjustment, anxiety and depression than the general population (Lie, 2012).

Management focuses on limiting further deterioration of swelling, enhancing limb function and gaining long-term control of the condition. Compression plays a central role in achieving these goals. There is increasing support for stiffer compression systems (e.g. short-stretch/inelastic) that provide high working pressures and low resting pressures (Parsons, 2007). However, concordance with compression is difficult to achieve in all patients using short-stretch hosiery ("It is just too tight"), and often means that a therapeutic level of compression is not consistently applied (Lawrence, 2008).

Encouraging self-management using an easy-to-apply system may help to achieve better control of stubborn oedema and provide clinical and economic benefits.

**Economic Benefits of Using FarrowWrap**

The following cost comparison demonstrates that the FarrowWrap system can provide a cost-effective option for lymphoedema management. A saving of £3402.96 was achieved using FarrowWrap compared to 2-layer compression bandaging (Fig 2).

At the start of the comparison, the patient was receiving twice-daily visits from the district nurses to change bandages and dressings. Using FarrowWrap, visits were reduced to once daily to provide skin care and reapply the compression wrap, saving 30 minutes per visit. The reduction in visits and nurse prescribing saved an additional £3340.09 in nursing time over 6 months (cost comparison based on data collected by Anne Tweedle, Tollcross Health Centre, Edinburgh).

**Figure 2: Comparing the cost of FarrowWrap with 2-layer compression bandaging**

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>FarrowWrap</th>
<th>Compression bandaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>£6000.00</td>
<td>3x £2000.00</td>
<td>£4000.00</td>
</tr>
<tr>
<td>£3000.00</td>
<td>3x £1000.00</td>
<td>£2100.00</td>
</tr>
<tr>
<td>£2000.00</td>
<td>3x £666.67</td>
<td>£1999.90</td>
</tr>
<tr>
<td>£1000.00</td>
<td>3x £333.33</td>
<td>£789.99</td>
</tr>
<tr>
<td>£500.00</td>
<td>3x £166.67</td>
<td>£279.99</td>
</tr>
<tr>
<td>£000.00</td>
<td>3x £00.00</td>
<td>£209.99</td>
</tr>
<tr>
<td>Total cost</td>
<td>£3402.96</td>
<td>£6340.09</td>
</tr>
</tbody>
</table>

*Costs are inclusive of VAT, correct as of March 2014.

**Q** What clinical and economic benefits have you seen in your practice?

In your experience, has FarrowWrap had a positive impact?

- Are patients who have previously had problems wearing compression hosiery able to tolerate FarrowWrap?
- Has improved concordance led to better control of oedema?
- Have patients had fewer admissions for cellulitis, reducing costs?

**Case Study**

**Background**

- Patient with secondary lymphoedema due to paraplegia following a road accident aged 16
- Evidence of worsening lymphoedema and 10-year history of ulceration and recurrent infections
- Diagnosed with severe arterial insufficiency September 2012 (compression therapy contraindicated)
- Following a left femoral popliteal bypass in April 2013, he was referred to the lymphoedema service in December 2013
- Patient responded well to compression bandaging
- Unable to wear hosiery for long-term management due to foot size (Fig 3) and skin being very fragile and at high risk of breakdown
- Patient introduced to FarrowWrap Lite due to past arterial surgery; ABI slightly above 0.8 threshold

**Outcome**

- Able to self-manage with the support of his care worker, who was shown how to apply the footpiece and legpiece
- Long-standing ulcer went on to heal in 3 weeks
- Leg volume remains stable
- FarrowWrap now worn for 12 months with no repeated occurrences of cellulitis or ulceration
- Has had a huge impact on the patient’s quality of life.

**Figure 3: Patient unable to wear compression hosiery due to foot swelling and skin condition**

Acknowledgement: Robin Cooper, Lymphoedema Nurse Specialist, Salisbury NHS Foundation

This Making the Case guide was developed using available literature and data provided by Haddenham Healthcare Ltd. © Wounds UK
## Monitoring Compression Therapy

**Patients Name:** …………………………………………………………………

**Unit Number:** ………………………………………………………………………..

**Date:** ……………………………………………………………………………

**Time Intervals:** …………………………………………………………………….

**Details of Compression Regime:** ………………………………………………………………………………………………………………………

<table>
<thead>
<tr>
<th>Factors to be monitored</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toes are pink</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toes are warm to touch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints of pins and needles in toes or foot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints of pain in the leg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints/observations of breathlessness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record time of intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature of Nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Factors to be monitored**

<table>
<thead>
<tr>
<th>Factors to be monitored</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toes are pink</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toes are warm to touch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints of pins and needles in toes or foot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints of pain in the leg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints/observations of breathlessness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record time of intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature of Nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Factors to be monitored**

<table>
<thead>
<tr>
<th>Factors to be monitored</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toes are pink</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toes are warm to touch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints of pins and needles in toes or foot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints of pain in the leg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints/observations of breathlessness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record time of intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature of Nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Factors to be monitored**

<table>
<thead>
<tr>
<th>Factors to be monitored</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toes are pink</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toes are warm to touch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints of pins and needles in toes or foot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints of pain in the leg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any complaints/observations of breathlessness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record time of intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature of Nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DP5633/06.12