Introduction
Short stretch compression bandages for venous ulcers are equally efficacious, when compared to other compression systems, independent of associated factors (picture 1, 2 and 3). This ensures a place for short stretch bandaging as a cost effective and proven method of "reversing venous hypertension and enhancing the wound repair process" (3). However there are many clinicians who still anecdotally believe that short stretch bandages cannot be used in immobility, although there is no published data to support this theory.

Examining the evidence
Hofman reviewed oedema reduction and described the care of two patients on whom the bandages were used to good effect where elastic bandages had failed (4). A recent study by Franks et al compared healing rates and quality of life using four layer bandages with a cohesive short stretch compression bandage and concluded that There was no evidence to suggest that patients with a mobility deficit experienced poorer healing on CSSB compared with 4LB (5) The recently completed York study found "no interaction between ankle mobility and healing rates in the two forms of bandages, an interaction that might have been expected if SSBs work better in people with good ankle mobility" (6).

Despite the increasing evidence to support the efficacy of short stretch bandages on patients with restricted mobility, many practitioners are withholding treatment of these patients, labelling them as "immobile and unsuitable for short stretch bandaging". This myth may be due to a lack of understanding of the physiology of venous return, the way in which the bandages work, and the definition of "immobility".

Defining mobility
The Collins dictionary (7) defines mobility as "capable of movement; easily moved or changed" and if this definition was reversed it would be incapable of movement; not easily moved or changed. The terminology, in relation to short stretch bandaging, is subjective and depends on the professional background of the assessor and their own interpretation of the terminology. Different members of the multidisciplinary team may assess the same patient (picture 4) but all could arrive at different interpretations of the patient's mobility status.
In order to define ‘mobility’ in relation to venous ulceration, one must understand the physiology that occurs during fine movement. The most important aspect of this movement relies on the foot and calf pump propelling blood up toward the heart. When weight is applied to the sole of the foot the plantar arch (figure 1) is flattened and the resulting longitudinal stretching of the veins allows the blood to be pumped along the long and short saphenous veins and into the deep calf veins where it is further stimulated by the calf pump. Therefore if the foot pump is activated when transferring from bed to chair, it is possibly all that is required to ensure short stretch bandage efficacy. Stretching of the plantar arch by passive exercises in the bed-bound patient also has the same effect, allowing this group of patients to be treated effectively with short stretch bandages.

**Linking evidence to practice**

The authors have devised a mobility tool to assist and to provide a vehicle enabling the practitioner to measure and define exactly what degree of limited mobility the patient is experiencing to allay fears of those who believe short stretch cannot be used in ‘immobility’. To address issues of restrictive mobility and the appropriate application of short stretch compression bandages, the status of the patient’s ambulatory ability could be measured by a simple tool (table 1) incorporated within the initial ulcer assessment.

According to the scale a score of 7 is the only time that the foot pump is not used and therefore the patient could be labelled immobile. In these cases it has been suggested that stretching the arch without weight bearing may be sufficient to empty the veins (8). If this is the case, it explains why many bed-bound patients have been successfully treated with short stretch bandages. Patients with scores of 2 to 6 will have full foot pump action and some calf pump involvement, and score 1 has full foot pump and calf muscle pump action. This mobility scoring chart is being validated in four nursing homes and by three specialists in the community.

**Conclusion**

Patient concordance with compression therapy is vital (9), and the choice of patient care should be based on sound evidence, and an understanding of how compression systems work to ensure that the best possible treatment regimes are implemented.
<table>
<thead>
<tr>
<th>Circle number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Immobile: unable to move unaided either in bed or chair. Cannot take own weight even with assistance</td>
</tr>
<tr>
<td>6</td>
<td>Assisted mobility: needing physical assistance from another person/s to walk or move. Can transfer with assistance</td>
</tr>
<tr>
<td>5</td>
<td>Restricted/limited mobility: able to transfer with assistance. Can walk a few steps but limited by physical or psychological problems e.g. shortness of breath, pain, failing sight, fear of falling, agoraphobia</td>
</tr>
<tr>
<td>4</td>
<td>Poor mobility: poor walking pattern, shuffling gait, decreased stride-length, poor posture. Muscle weakness, deformity</td>
</tr>
<tr>
<td>3</td>
<td>Independent with equipment: able with specific (daily living) equipment to achieve independence</td>
</tr>
<tr>
<td>2</td>
<td>Independent with supervision: physically able to take own weight but needs supervision and/or prompting to ensure correct use of equipment, walking pattern or orientation</td>
</tr>
<tr>
<td>1</td>
<td>Independent mobility: able to walk, transfer, lie down/get up, ability to exercise within their limitations</td>
</tr>
</tbody>
</table>

**Table 1**

"These (Cohesive inelastic compression systems) have greatly reduced slippage and are effective in immobile patients, for whom elastic compression has previously been the first line of treatment"

Moffatt C (2004)

References