

## Shanley Pressure Ulcer Prevention Programme



### (SPUPP); Summary report & Patient Outcomes

#### *What is known about pressure ulceration?*

The European Pressure Ulcer Advisory Panel defines a pressure ulcer as “a localised injury to the skin and/or underlying tissue, usually over a bony prominence, resulting from sustained pressure (including pressure associated with shear). A number of contributing factors are also associated with pressure ulcers; the primary of which is impaired mobility. Pressure ulcers have a significant impact on patient’s lives, with quality of life studies demonstrating that compared with similarly aged people; patients living with these wounds have a lower quality of life. Pressure ulcer prevalence rates increase significantly with age, and in Ireland the highest rate of growth in age groups is among older people. Patient’s right’s to have a central part in the healthcare process is an important aspect of health care provision and the benefits include enhanced motivation and knowledge about health and illness, and increased capacity for patient’s to monitor and look after themselves. Patient involvement in pressure ulcer prevention tends to be limited, as this aspect of care has been largely viewed as being in the domain of the trained health care professional. Prevention of pressure ulcers is a key issue for enhancing health, and education is a means to empower people to take an active role in health promotion.

#### *What is the Shanley Pressure Ulcer Prevention Programme (SPUPP)?*

Dr Emer Shanley, CNS Tissue Viability, designed SPUPP in conjunction with Professor Zena Moore and Dr Declan Patton of the Royal College of Surgeons in Ireland in addition to a multidisciplinary team that included nursing, dietetics, and physiotherapy. SPUPP is an innovative patient education package for people who may be at risk of pressure ulceration. It utilises multimedia, hard copy materials, activities and patient diaries. SPUPP is designed around the key tenets of pressure ulcer prevention as described by the SKIN bundle, which are Skin (S), Keep Moving (K), Incontinence (I) and Nutrition (N). It promotes chronic disease management, better health and well-being and seeks to empower patients to participate in there own care and self manage their risk of pressure

ulceration. SPUPP also encourages participation in self-management activities to augment formal care. The use of nurse facilitation delivers evidence based patient education, together with support and monitoring.

### *Content of SPUPP*

SPUPP is delivered in a multimedia format consisting of 5 short sessions with each one focusing on one aspect of the SKIN bundle (see figure 1). Participants watch a short video presentation with the main messages reinforced consistently through various formats namely audio (jingle), booklet, summary sheets, activities and patient diaries. Family members or carer's are also encouraged to watch the programme.

#### *Session 1: Introduction*

This session provides an overview of the programme and explains the role of the skin. Potential risks to skin integrity such as health conditions, ageing, moisture, sensation and nutrition are briefly explored. The concept of pressure, friction and shear is also mentioned in this session. A pressure ulcer is defined, and information provided about risk factors for developing pressure ulcers.

#### *Session 2: Skin*

This session focuses on skin care. The reasons for checking skin are outlined. The participant is informed gently that they may be at risk of developing a pressure ulcer due to reduced mobility. Practical tips for, how, where, and when to check the skin are provided and an explanation of the signs on the skin that may indicate pressure damage such as red patches that don't go away over time. Session 2 also provides some practical tips for keeping the skin in good condition. At the end of the session, participants are provided with some samples of soap substitutes and moisturisers to test at home.

#### *Session 3: Keep Moving*

This session focuses on ways to prevent pressure ulceration by "keeping moving". The benefits of being active are discussed. Practical advice on the recommendations for older adults to keep active is touched upon. Session 3 also explains ways of moving safely and relieving pressure whilst sitting. Video clips provide skills for sitting safely and standing safely and discusses how to prevent pressure ulceration whilst lying in bed. The

participant is also given an activity sheet to complete, over the following week. The diaries record three aspects of the participant's activities of daily living for the next 6 days. Participants record how much time they spend lying in bed and sitting down over twenty-four hours. They also record how much time they spend walking and are encouraged to reach a daily target of thirty minutes. The diary is examined and discussed at the next session and suggestions of modifications to the activity level can be introduced.

#### *Session 4: Nutrition*

This session focuses on nutrition and discusses how the food that is eaten in addition to the fluids consumed affects general health. It briefly discusses the food pyramid and gives some examples of typical servings, and suggestions from each shelf of the food pyramid. Healthy eating and cooking tips are also provided. Hydration is also discussed and the necessity for adequate fluid intake to ensure optimum health. The participant is given a food diary to complete for four days. This diary was designed to record fluid and food intake over a twenty-four-hour period. The contents of the diary are discussed at the next session and advice given on dietary modifications if required.

#### *Session 5: Incontinence*

This session focuses on incontinence and provides a brief definition. Some of the common causes of bladder and bowel incontinence are listed. General skin care advice for people who are incontinent is provided and samples of products that can be used for cleansing and protecting the skin from incontinence are provided.

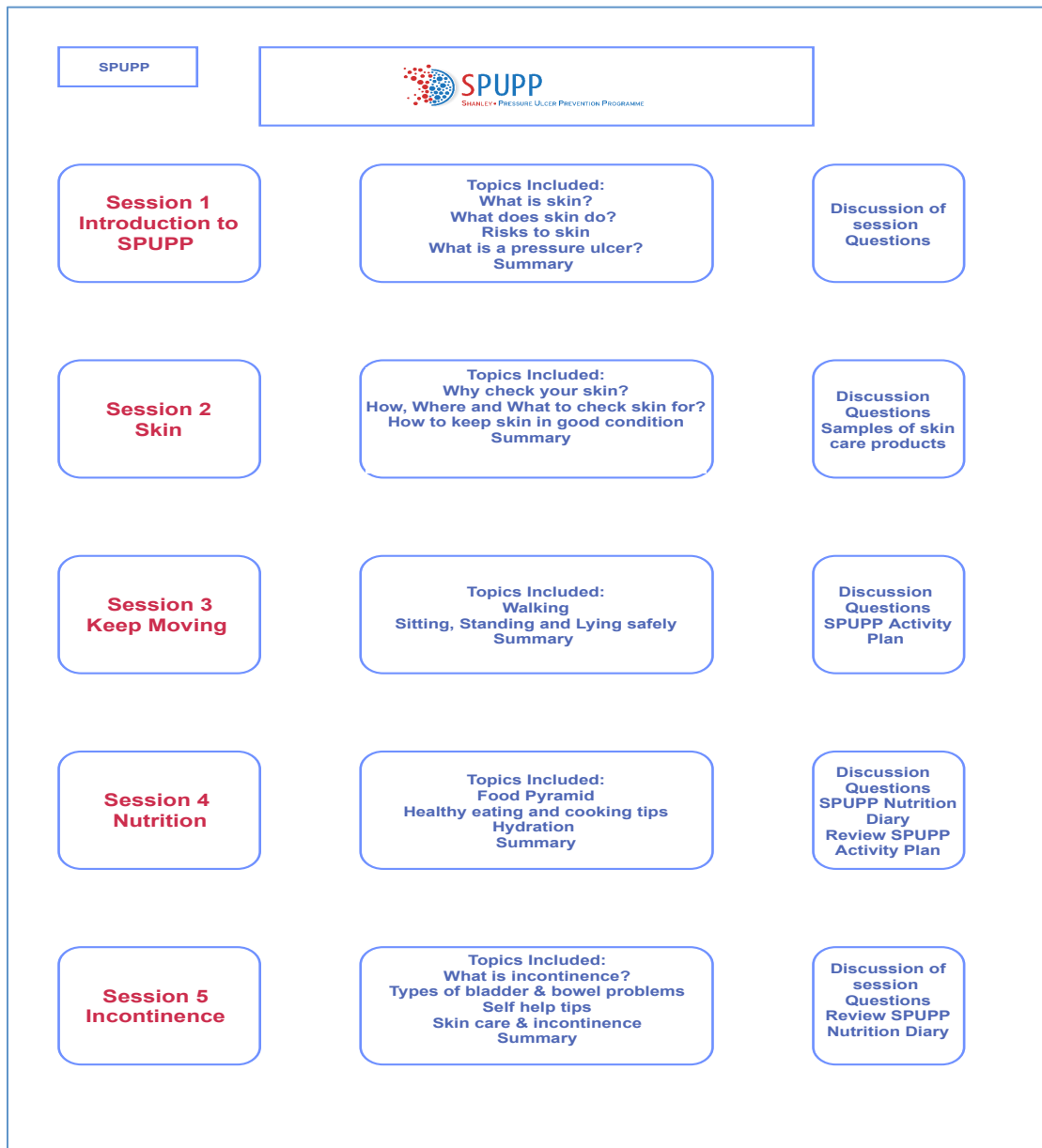


Figure 1: The SPUPP

### *Study Design for the Evaluation of SPUPP:*

- *Aim:* Develop implement and evaluate SPUPP on knowledge, attitudes and behaviours of older adults, at risk of pressure ulceration, living independently in the community.
- *Method:* multi-centre, open label randomised controlled trial (RCT) to determine the impact of the intervention on the participant's knowledge of, and attitudes and behaviours towards pressure ulcer prevention.
- *Eligibility:* older persons living in the community who attend either a day care centre or a retirement group, and were deemed to be at risk of pressure ulcer, due to reduced mobility.
- *Recruitment:* January to July 2017.
- *Data Collection:* Matched participant pre and post measures (KPUP-Patient Knowledge of Pressure Ulcer Prevention Tool).
- *Analysis:* Descriptive analysis was used to summarise, describe and explain the data, which is presented in numerical form to portray important features.

### *Study Results*

64 Participants completed the SPUPP programme and were randomised to either the control or intervention group. The key findings from the SPUPP evaluation are as follows:

- 68.8% (n=44) of the participants were either overweight, or obese;
- 47% (n=30) were incontinent;
- 75% (n=48) of the participants were considered at mild risk of pressure ulcer according to the Braden pressure ulcer risk assessment tool;
- Both groups averaged 58% correct answers in the knowledge section pre-test (mean 11.68,SD: 3.09 intervention; SD: 0.60 control);
- Post-test the intervention group averaged 84% correct answers, versus 62% correct answers in the control group;
- Knowledge scores for the control group pre and post intervention were: mean 11.69 SD: 3.60, versus 12.41 SD: 3.31, respectively;
- Knowledge scores for intervention group pre and post intervention were: 11.69 SD: 3.09 versus 16.87 SD: 1.88, respectively). The mean difference was 4.47 (95% CI:

3.19 to 5.75;  $p=0.00001$ ) which showed a statistically significant difference in knowledge scores post intervention.

Positive changes were also noted in favour of the intervention group, regarding self-reported health behaviours and attitudes towards pressure ulcer prevention. The intervention group saw an increase in the proportion that rated their nutritional intake as excellent and reported an increase in fluid intake, whilst the control group did not report a change in these variables. The intervention group rated the SPUPP very highly. In summary, the SPUPP impacted positively on knowledge scores of the participants and also positively influenced attitudes and behaviours towards pressure ulcer prevention. Thus, this research provides useful information regarding the potential to enhance patient involvement in PU prevention.

### *What SPUPP achieved*

- Standardised patient education in line with evidence based practice
- Improved patient knowledge and healthy behaviours and self-management practices
- Increased use of pressure ulcer prevention strategies
- Patient and nurse engagement in health promotion

### *References*

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