

**\*Robert Bishop, David Huynh, Dr Bonne Lee, Jenny Nicholls**

AT&S Centre, Prince of Wales Hospital, Sydney, Australia

SPCC, Prince of Wales Hospital, Sydney, Australia

## Background

The Assistive Technology and Seating Centre (AT & S Centre) at Prince of Wales Hospital works in partnership with the Spinal Pressure Care Clinic (SPCC) and receives referrals for inpatients and outpatients with chronic and complex pressure areas. These clients often struggle to remain in side lying position, for the time specified by the SPCC team. Thereby increasing their risk of flap breakdown (following surgical intervention) or pressure area redevelopment.

## Aim

To highlight best practice in positioning pressure care clients (with a spinal cord injury) in side lying, whilst on bedrest and when working their way through a customised seating protocol.

## Method

### Case Study

- Male, 50 years old
- Complete T6 Spinal Cord Injury
- Pressure area - 2 year history of significant pressure area preventing patient from sitting
- Current pressure area on Left Greater Trochanter
- Bedrest protocol - requires side lying position on right side, to allow healing on Left Greater Trochanter



Pillows  
Partial bed surface contact on pressure ulcer, located on left greater trochanter  
Photo 1 (left): Patient in side lying position using standard hospital pillows

### The Problem (baseline)

Issues encountered with patient in side lying position using standard hospital pillows are:

- Poor surface support for back
- Minimal relief of pressure sore
- Minimal comfort
- Requires lots of attention with repositioning

## Project Goals

**Goal 1 Doctor and Wound Nurse:** The supporting device will maintain patient in side lying position and prevent surface contact on pressure ulcer.

**Goal 2 Patient:** The supporting device will provide comfort to patient in side lying position.

**Goal 3 Carers:** The supporting device will be easy to apply under patient and requires minimal repositioning.

## Solution:- Side Lying Wedge (SLW)

### Who

Design and construction carried by Technical staff at AT&S Centre Prince of Wales Hospital

### Material

Foam (PE905, HR38, SLO), wet suit material, foam adhesive, wedge shape template.

**Dimension** 100 (W) x 200 (H) x 550 (L)

**Weight** 0.550 kg

**Cost** \$350

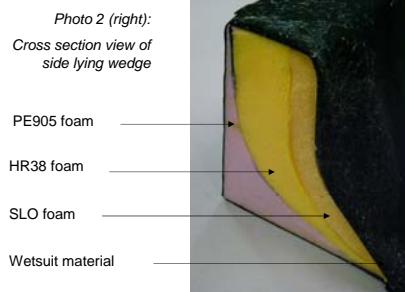


Photo 2 (right): Cross section view of side lying wedge

PE905 foam  
HR38 foam  
SLO foam  
Wetsuit material

## Application



Side Lying Wedge  
Nil bed surface contact on pressure ulcer, located on left greater trochanter  
Photo 3 (left): Patient using Side Lying Wedge (SLW)

## Outcome Measure Using Goal Attainment Scale (GAS)

- Identify each client goal and assign 3 possible outcomes ranging from -1 to +1
- For each outcome, Score = -1 (for less than expected), 0 (for expected level of performance at end of treatment), +1 (for better than expected)
- Calculate t-score

## Results

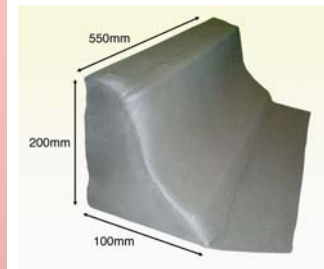
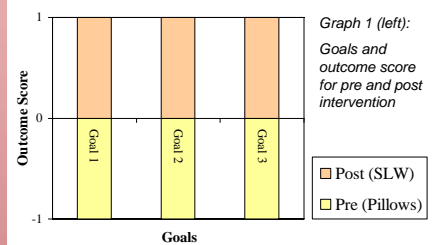


Photo 4 (left): Completed Side Lying Wedge (SLW) upholstered in wetsuit material

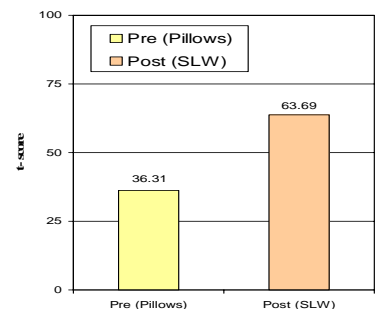
The outcome measured for all goals were better than expected.



## GAS t-score

$t_{(Pre)} = 36.31$  (patient using pillows) and  $t < 50$  indicates pillows performs below the expected level

$t_{(post)} = 63.69$  (patient using SLW) and  $t > 50$  indicates the SLW meets project goals and performs above the expected level.



## Conclusion

The Side Lying Wedge (SLW) has been trialled successfully with clients, since 2005. The wedge has provided over 40 clients with a positioning solution that optimises pressure management, client comfort and compliance.

## Acknowledgements

Thank you for the support of all staff and patients from SPCC and AT&S Centre at Prince of Wales Hospital.

•Contact: Bob Bishop (02) 9382 8272