

## Results from Brightwater Postural Care Trials.

These trials were designed to show the savings on the labour force should the Postural Care training that the organisation had developed be implemented (see One Note file for details). Hopefully the full report will be available soon.

In short, there were 8 residents involved and all the carers were thoroughly trained over a 3 month period. Details about duration and timings will be available in the main report however, the whole project took 12 months.

First looking at some employment statistics

	Financial year 2009/2010	and July 2010- April 2011
New hires	26	4
% workforce that are new	26.53	5.7

They found that by engaging staff more through Postural care training and increased responsibility new hires dropped by nearly 21 % and at the end of the period of observation, 94% had been employed for more than 3 months compared to 73% at the start.

They also found that for 102,000 hours worked at the outset there were 5135 hours of unplanned leave and following the training for 112,428 hours worked there were 3661 hours of unplanned leave. There were also improvements in the “Medical treatment frequency injury rate” amongst staff.

They also restructured staff functions and looked at who shared responsibility for different activities

Postural Care Activity	Prior	After training				At conclusion			
	A/H	CW	RN/EN	A/H	T/A	CW	RN/EN	A/H	T/A
Identification	100%	0	50	50	0	10	40	40	10
Assess	100%	0	0	100	0	0	10	90	0
Trial	100%	60	10	20	10	60	10	20	10
Implement	100%	80	0	20	0	70	10	10	10
Review	100%	10	10	80	0	20	20	50	10

A/h- Allied Health Professional (therapists)

CW- care worker

RN/EN- Nursing

T/A tech assistant

Over the duration of the trial they moved from a service delivered by the AHP staff to a service delivered by the team, all activities being shared. It would not have been possible to do this without the training. They also changed their clinical meetings. At the outset these included the AHP and

nursing staff who did all the documentation. At the conclusion, the meeting also included a postural care champion form the care staff who also completed documentation.

**Results** (Missing one resident from this).

<p><b>Resident A</b> Aim: Maintain symmetry and assist with pain management Outcome: symmetry maintained. Chest symmetry improved. Resident reports pain in left hip when lying in bed (previous fractured left NOF) .Resident reports pain is reduced when set up in Postural Care, in particular a flexed left hip. Cardinal bed replaced with standard bed. Comments. Care worker staff report resident is "more straight". Resident has reported he finds Postural care comfortable and wishes to continue</p>
<p><b>Resident B</b> Aim: Maintain symmetry Outcome: Improved chest and pelvic symmetry Resident has progressed from requiring a Regency flotation chair to a recline/tilt wheelchair with supportive Cushions. Comments Resident was unable to lie flat on her back due to significant difficulty with saliva management. Alpha-Xcell overlay removed. Resident was provided a Cirrus mattress to enable resident to lie in bed with head elevated 30-40 degrees Care worker staff report resident is much "straighter" and "looks a lot better", "is sitting better" and "looks comfortable" in Postural care. Night staff are not required to attend to resident between 10pm-5am unless an incident occurs. Previously resident required turning every 2-3 hours and had a pad change during the night.</p>
<p><b>Resident c</b> Aim: To provide a more symmetrical posture for the resident to "fall" into when relaxed. Outcome: Chest and pelvic symmetry improved. Comments: Alpha-Xcell overlay removed. Resident suitability for Postural Care was questioned initially due to the extent of the resident's active movements. Site staff were advised that this resident would move and postural supports do move out of place. In the After Postural Care photograph it is evident that the resident does not feel secure/stable without any support as the resident attempts to curl up. Night staff are not required to attend to ??? (need to confirm when published)</p>
<p><b>Resident d</b> Deceased.</p>
<p><b>Resident E</b> Aim: Maintain Symmetry and encourage flexion in hips and knees Outcome: Symmetry maintained Ripple overlay removed. Comments: Resident reports Postural Care is comfortable and is happy to continue receiving Postural care . Care worker Staff are making attempt to provide postural support outside the times when resident is in Postural care as evident in the After Postural Care photograph. Night staff are not required to attend to resident between 10pm-5am unless an incident occurs. Previously resident required turning every 3 hours and had a pad change during the night.</p>

Resident F

Aim: Maintain symmetry

Outcome: Symmetry maintained

Comments: Resident developed a sacral pressure area after midway evaluation A number of causal factors

contributed to development of pressure area i.e. continence management, wheelchair cushion over expected lifespan, extended seated periods. The Alpha x-cell overlay which was removed at the start of Postural care was re-fitted to assist with pressure area healing. Staff report resident is 'standing better in the standing hoist since starting Postural Care and that the resident looks comfortable in Postural care. Night staff are not required to attend to resident between 10pm-5am unless an incident occurs. Previously resident required turning every 4 hours and had a pad change during the night.

Resident G

Aim: Improve postural symmetry,

Outcome: Chest and pelvic symmetry improved. Duocare overlay removed.

Comments: Resident did not use Postural Care continuously for duration of project; Resident was admitted to hospital for 1 week for a change in medical status. Resident also developed blisters during the summer months which required Postural Care to be suspended. Blisters were located over residents contact area with hip blocks, Additional temperature regulation strategies were implemented once blisters healed to enable Postural Care to resume i.e. regulated temperature of air conditioner and replacement of plastic all-in-one continence pad to a pad insert and netting type underwear. Resident was initially provided a Venti mat as part of her Postural care to assist with temperature regulation. Staff report residents legs are 'more straight following Postural Care making it easier for staff to move her during routine care tasks, Staff also report resident looks comfortable in Postural care. Night staff are not required to attend to resident between 10pm-5am unless an incident occurs. Previously resident required turning every 2-3 hours and had a pad change during the night.

Resident H

Aim: Maintain symmetry and encourage flexion in hips and knees

Outcome: Symmetry maintained. Knee range of movement improved. Alpha x-cell overlay removed

Comments: Residents health declined throughout duration of project. Note in After Postural Care photograph site staff are practicing Postural Care strategies when residents are not in 'Postural Care" (pillow under knees). Night staff are not required to attend to resident between 10pm-5am unless an incident occurs. Previously resident required turning every 2-4 hours and had a pad change during the night Staff report resident looks comfortable in Postural care.

Resident I

Aim: Maintain symmetry and encourage flexion in hips and knees.

Outcome: Symmetry maintained Pelvic obliquity improved.

Comments: Resident was recruited to project following passing of resident D. Resident received Postural Care from January to May. Staff report resident is easier to move following Postural Care. Staff report resident looks comfortable in Postural Care. Night staff are not required to attend to resident between 10pm-5am unless an incident occurs. Previously resident required turning every 2 hours and had a pad change during the night.

## Comments on pressure

A number of other residents had pressure areas develop that were not related to Postural Care. Four out of five residents who were using mattress overlays as part of their pressure management plan were able to have overlays removed while using Postural Care without the incidence of pressure areas increasing.

The pressure areas that developed during the project duration cannot be conclusively linked to Postural Care. Regarding resident F, this resident has management issues and spends most hours of the day sitting in a wheelchair. Pressure management strategies were implemented including use of an alpha x-cell overlay on the bed, a jay cushion for the wheelchair and a reduction in hours spent sitting in the wheelchair during the day. Following implementation of these strategies the pressure area began to heal. A referral to the incontinence nurse was also requested. Regarding resident G, this resident is unable to regulate body temperature and as a result is always hot to touch and sweats excessively. This resident was also hospitalised for a short period during the trial for investigation of holding breath behaviour. Strategies implemented to address blisters were to re-clarify the air conditioner for the room to be set at 18 degrees, recommendation breathable clothing material and a referral to the incontinence nurse to follow up recommendation to eliminate plastic all in one pads and use of a pad insert with netting underwear

**34. Project Evaluation Measure 34: Changes in care outcomes**

Changes in care outcomes using number of interventions provided by care workers at night time

Resident ID	Prior to project (27/09/2010-10/10/2010)	At commencement of night use of Postural Care	Completion of project
	# of interventions by night staff 8.45pm-7.15am specific to Postural Care		
A	No repositioning as has recumbent bed with automatic 2hourly turning Pad check and change as required at 10pm, 2am and 5am Check resident hourly	Set up P.C equipment 10-11pm Remove P.C equipment 5-6am Pad change 10pm, 5am Check resident hourly	Resident already set up in Postural Care Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am
B	Repositioning in bed: 10pm, 12am, 2am, 4am, 6am Pad check and change as required during night Morning pad change Check resident hourly	Set up P.C equipment 10-11pm Remove P.C equipment 5-6am Pad change 10pm, 5am Check resident hourly	Resident already set up in Postural Care Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am

Resident ID	Prior to project (27/09/2010-10/10/2010)	At commencement of night use of Postural Care	Completion of project
I	Repositioning in bed: Pad check and change as required during night Morning pad change Check resident hourly	Resident already set up in Postural Care Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am	Resident already set up in Postural Care Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am

Although night staff were advised initially of the 10pm and 5am pad changes, it has taken the duration of the implementation phase for all staff to accept and have confidence to change their work behaviour specific to timing of pad changes. At the completion of the project night staff have adopted the practice of 10pm and 5am pad changes and limit disturbing residents at night. When night time observations were requested at the final stages of the project night staff reported they did not like going into the resident's room and disturbing their sleep. Night staff are conscious of the quality of sleep of the residents receiving Postural care.

Resident ID	Prior to project (27/09/2010-10/10/2010)	At commencement of night use of Postural Care	Completion of project
C	Repositioning in bed: 10pm, 12am, 2am, 4am, 6am Pad check and change as required during night Morning pad change Check resident hourly	Set up P.C equipment 10-11pm Remove P.C equipment 5-6am Pad change 10pm, 5am Check resident hourly	Resident already set up in Postural Care Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am
D	Repositioning in bed: 10pm, 1am, 4am Pad check and change as required during night Morning pad change Check resident hourly	Deceased	
E	Repositioning in bed: 10pm, 1am, 4am Pad check and change as required during night Morning pad change Check resident hourly	Set up P.C equipment 10-11pm Remove P.C equipment 5-6am Pad change 10pm, 2am, 6am Check resident hourly	Set up P.C equipment when resident returns to bed Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am
F	Repositioning in bed: 10pm, 12am, 2am, 4am, 6am Pad check and change as required during night Morning pad change Check resident hourly	Set up P.C equipment 10-11pm Remove P.C equipment 5-6am Pad change 10pm, 5am Check resident hourly	Resident already set up in Postural Care Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am
G	Repositioning in bed: 10pm, 1am, 4am Pad check and change as required during night Morning pad change Check resident hourly	Set up P.C equipment 10-11pm Remove P.C equipment 5-6am Pad change 10pm, 5am Check resident hourly	Resident already set up in Postural Care Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am
H	Repositioning in bed: 10pm, 12am, 2am, 4am, 6am Pad check and change as required during night Morning pad change Check resident hourly	Set up P.C equipment 10-11pm Remove P.C equipment 5-6am Pad change 10pm, 5am Check resident hourly	Resident already set up in Postural Care Pad change at 10pm, 5am Check resident hourly Remove P.C equipment 5-6am

**21. Project Evaluation Measure 21: Change in staff functions/work structure**  
 Change in staff functions/work structure using number of tasks/duties transferred/created using duty list / staff mapping

(Specific to Postural Care. Tasks completed by Care Workers and Enrolled nurses).

	Time			
	4am – 9am	9am– 1pm	1pm- 8pm	8pm-4am
Prior to project	<ul style="list-style-type: none"> <li>Remove soiled linen and place in linen bin</li> <li>Make bed</li> <li>Pad check and change</li> </ul>	<ul style="list-style-type: none"> <li>2-4 hourly repositioning</li> </ul>	<ul style="list-style-type: none"> <li>2-4 hourly repositioning</li> <li>Pad change</li> </ul>	<ul style="list-style-type: none"> <li>2-4 hourly repositioning</li> <li>Pad check and change 10pm</li> <li>Pad check and change 2am</li> </ul>
At commencement of project	<ul style="list-style-type: none"> <li>Remove soiled linen and place in linen bin</li> <li>Ensure <b>Veltex mat</b> is fitted to bed</li> <li>Pad check and change</li> </ul>	<ul style="list-style-type: none"> <li>2-4 hourly repositioning</li> </ul>	<ul style="list-style-type: none"> <li>DAY TRIALS</li> <li>Set up Postural Care equipment as per Care plan</li> <li>Observations at set up, 2 hours, 4 hours and 6 hours (10 days only)</li> <li>If brackets included in Care Plan remove brackets for residents sitting up in bed for evening</li> <li>Following evening reposition resident and Postural Care equipment for remainder of time in trial (3 x 6</li> </ul>	<ul style="list-style-type: none"> <li>2-4 hourly repositioning</li> <li>Pad check and change 10pm</li> <li>Pad check and change 2am</li> </ul>

	Time			
	4am – 9am	9am– 1pm	1pm- 8pm	8pm-4am
Completion of project	<ul style="list-style-type: none"> <li>Remove soiled covers and wash in Peppermint/Birch pan room. (Refer to cleaning instructions in Postural Care folder)</li> <li>When making bed ensure <b>flat sheet</b> is fitted to bed rather than fitted sheet</li> <li>Pad check and change</li> </ul>	<ul style="list-style-type: none"> <li>Check all soiled Postural Care covers are washed and hung out in Peppermint garden before 12 noon. (Refer to cleaning instructions in Postural Care folder)</li> <li>Apply clean covers to Postural Care equipment as needed (Second sets of covers are kept in the residents wardrobe)</li> <li>Ensure <b>Veltex mat</b> is fitted to bed for those residents requiring a Veltex mat as per their Care Plan</li> </ul>	hour trial days) <ul style="list-style-type: none"> <li>Collect clean covers hung in Peppermint garden and return to residents room</li> <li>Ensure all Postural Care equipment has covers on</li> <li>For residents returning and remaining in bed, set up Postural Care equipment as per Care Plan</li> <li>Complete a pad change and wash after tea</li> </ul>	<ul style="list-style-type: none"> <li>For residents returning to bed, set up Postural Care equipment as per Care Plan</li> <li>Final pad change between 9-10pm (Wash already completed earlier in evening) until morning.</li> </ul>

Manual handling associated with repositioning every 2-4 hours has been eliminated for day and night care staff. 2am pad check and change has also been eliminated for night staff. Additional light manual handling is added to day care staff duties through changing of equipment covers and set up of clients Care in the afternoon / evenings.

**Course experience-**

For 1 x 63 bed home, it took 12 courses.

These 2 day courses had 1 trainer for day 1 and 2 for the second day.

6-10 staff on a course.

Therapists only needed 1 day.

Courses were best held over consecutive days with no break.

Home dealt with challenging behaviours, MS, Huntingtons and physical difficulties.

It took 8 weeks to roll out the courses through all shifts.  
Staff had to be paid to "backfill" for those being trained. Night staff were trained in the day, so there was an extra day's backfill for each to allow for shift adjustment.

As it was a roll out, the enthusiasm of those on later courses re-invigorated those who had started earlier.

When new staff were hired, once enough could be gathered, they received the training.

Those carers who did well were given specialist status. Specialist attend the daily staff meetings.

At the meetings the specialists raise any issues e.g. missing parts.

Postural care is embedded in the care plans. The therapist writes the plan.

The staff were disciplined if they did not follow the care plan. (1 member was difficult).

### **Implementation of the study**

Started with 8 residents with postural problems.

Care plans were written.

1 had swallowing problems so the Speechy was involved.

Equipment was trialed in the afternoon for 2 hours.

Then used for:

2 hours for 3 days,

4 hours for 3 days

6 hours for 3 days

8 hours for 3 days.

Nurses did the observations,

If there was a tiny bit of pinkness, staff would react. The method here was to take the sleep kit out and see if the pink persisted so highlighting the true cause.

Turning was used primarily as a death check as historically staff were held accountable. Increasing the inco pads reduced the need for change.