# *Expert Transfers in Rehabilitation: A Safety and Utilisation Review*

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Continuing the Mission of the Sisters of Charity

- An important focus in stroke rehabilitation is enabling the person with stroke to be an active participant in the acquisition of skills. Where stroke results in physical disability, motor skills such as transferring from lying to sitting, from bed to chair and chair to toilet are key to regaining independence. There is a strong body of evidence supporting the need for opportunities to practice to improve physical abilities

# Background

- **A rehabilitation context which requires patient participation within the No Lift legislation**
- **The use of assisted transfers as an integral component of 24 hour rehabilitation programme**
- **Development of competency training package to ensure optimisation of safety**

# Pivot transfer

**Features**

- Lying to sitting, sit to a low half stand through lateral weight transfer
- Weight bearing primarily through the less affected leg,
- Rotation of the pelvis with regard to the feet
- Performed towards the less affected side only
- 2 staff are utilised
- Patient must bear all of own weight
- Staff provide guidance and stabilisation only

**Benefits**

- Requirement to be active against the force of gravity, assists recovery of postural control
- Experiencing midline orientation, controlled weight transfer and rotation of body segments in relation to each other, assisting recovery of postural control, sensory and perceptual abilities
- Opportunity to participate in achieving a core motor task, enabling engagement in the rehabilitation process

# Stand and step transfer

**Features**

- Coming into erect standing
- Stepping legs alternately to turn
- Performed in either direction
- Able to be performed by one person
- Staff provide guidance and stabilisation only

**Benefits**

- Optimal alignment of body segments during sit to stand and standing
- Attainment of midline orientation in standing and free standing balance prior to stepping
- Alignment of affected leg in extension (without hyperextension) prior to weight transfer on to affected leg
- Optimising appropriate postural stabilisation of the stance leg to enable stepping
- Achieving optimal weight transfer across the midline for stepping of alternate feet.

# Risk assessment

- **Using a risk assessment model to identify potential hazards,**
- **Preparing the environment and patient to facilitate an active transfer,**
- **Utilising specific indicators to determine whether the transfer should proceed**

# Purpose - 1

- **Analyse and assess the risk of injury to staff associated with implementation of the training package and the utilisation of the transfers on a rehabilitation ward**

# Purpose - 2

- **This study reports the results of a utilisation review of the pivot and stand and step transfers. This review has two aims;**
  - **to investigate whether the transfers were utilised by staff in patients with moderate to severe stroke, and**
  - **to examine whether patients progressed in their ability to transfer towards independence or minimal dependence during their rehabilitation stay.**

# Safety Review

- Nine incidents related to patient transfers were identified over a seven year period (1999-2006)
  - Incidents were identified by routine incident reporting
- No days of work were lost due to injury
- Six incidents reported for the pivot transfer
- No incidents were recorded for the stand and step transfer
- Three incidents were recorded related to pushing or pulling hoists
- An earlier review of manual handling related incidents on the rehabilitation ward between 1992 and 1994 indicated that 15 incidents occurred when transferring patients in the two year period.

# Safety Review – Pivot transfer

| Cause of incident | Number of incidents |
|---|---|
| Nurse performing the transfer without training in the transfer competency (staff not working regularly in unit) | 3 |
| Nurse not complying with protocol requirement for two staff to perform transfer | 1 |
| Poor transfer technique | 1 |
| Patient aggression during transfer – not related to transfer technique | 1 |

# Utilisation Review

- **Records of patients admitted to the Rehabilitation Unit over a twelve month period (January 2005 to December 2005) with a diagnosis of stroke were reviewed**
- **Those scoring ‘3’ or less on the FIM for the Bed to Chair transfer were included in the study**
- **Each patient’s course of rehabilitation was charted in terms of type of transfer utilised and length of time spent at each particular type of transfer**
- **Length of stay, age, gender and discharge destination were also recorded.**

# Utilisation Review

- 23 patients (12 men, 11 women)
- Average age 67.5 years (range 35-87)
- LOS: 47.5 days (range 12-103)
- Discharge Destination:

| Destination | Numbers (n = 23) |
|---|---|
| Home with carer | 15 |
| Home alone | 2 |
| Hostel | 1 |
| Nursing Home | 5 |

# Utilisation Review

| Transfer Type | Total Time at each Transfer Level (%) | Highest Level of Transfer Achieved: Number of Cases (N=23) |
|---|---|---|
| Hoist | 20 weeks (13%) | 3 |
| Pivot | 35 weeks (22%) | 2 |
| Stand & Step | 38 weeks (24%) | 0 |
| Min Assist | 20 weeks (13%) | 3 |
| Supervision | 26 weeks (17%) | 8 |
| Independent | 18 weeks (11%) | 7 |

# Discussion

- **The utilisation review demonstrates that the pivot and stand and step transfers are extensively utilised in the rehabilitation of moderate and severe stroke in our unit**

- **The safety review has demonstrated that use of the transfer competencies was associated with few reports of staff or patient injury during transfers**

# Key Aspects to Competency Package

- **Structured Training Package**
  - **Written guidelines**
  - **Videos**
  - **Supervised training**
- **Peer trainers**
- **Annual assessment procedure**
- **Recognition of the role of No Lift in the workplace**

# Key Elements to Training

- **Risk assessment is a core aspect of the training.**
- **The model involves the staff member acquiring the skills to:**
  - **guide the patient through the transfer,**
  - **assess and monitor the patient's suitability for the transfer, both before commencing the transfer and at each stage of the transfer**
  - **Staff members are required to demonstrate that they can independently utilise the risk assessment processes**

# Risk Assessment

- **Patients must display certain functional capacities in order to participate in a pivot or stand and step transfer**
- **Such as:**
  - **Able to move from lying to sitting with guidance or minimal assistance**
  - **Able to weight transfer in sitting with assistance**
  - **Must not block the transfer**
  - **Must have active control of one leg**

# Why use these transfers?

- **Pivot and stand and step transfers are useful tools in the early stages of recovery of patients with moderate to severe stroke,**
- **Pivot and stand and step transfers provide an opportunity for the person to relearn postural and balance abilities, spatial perceptual abilities and co-ordinated control of body segments**
- **Provide experiential learning**
- **Pivot and stand and step transfers provide the capacity for a patient to practice transfers on the ward, increasing active therapy time and maximising functional practice of activities like getting on and off the bed or toilet**

# Why use these transfers?

- **Provides an opportunity for patients to problem solve;**
- **Allows patients to notice improvements in their function;**

# WorkSafe

- **WorkSafe categorises the standing pivot transfer as “high risk: very likely to cause injury”. The standing pivot transfer described requires the handler to lift, carry and lower the patient’s body weight**

- **THIS IS NOT THE TRANSFER DESCRIBED IN THIS STUDY**

- **It is important to note that the pivot transfer described in this study does not involve bringing the patient into standing, nor does it require any lifting by the handler. Both the pivot and stand and step transfers discussed in this paper require the patient to be an active participant, able to bring themselves onto their feet and take their own full body weight.**

# WorkSafe

- **The nurse or therapist provides guidance as to the direction and timing of the movement and momentary stabilisation of some body parts to enable the patient to complete the movement.**
- **If the patient is unable to be an active participant in any aspect of the transfer this is a signal to stop the transfer and use other methods**
- **The patient must take their own body weight, at no point does the nurse or therapist carry the weight or any part of the weight of the patient**

# Ongoing Implementation

- **To fulfil legislative requirements, the transfers utilised in the competency package are regularly reviewed utilising the class risk assessment processes delineated in the Worksafe guidelines, to minimise the risks involved in performing the transfers.**

# Contact

- **For further information about this study or the competency package please contact me via email:**
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