



Person-Centred Care: Selecting the Right Products for a Patient with Complex Needs to help commence Rehabilitation and Reduce Risks

- ↑ Rehabilitation underway following extensive brain injury
- ↓ Reduced moving and handling risks for staff
- ↑ Skin integrity maintained

Introduction

Penny* (age 44) was admitted to hospital following a CVA. She weighed 156kg on admission, and had the following comorbidities:

- **Type 2 diabetes**
- **Hypertension**

Prior to hospital admission, Penny had been independently mobile at home. She was unconscious on admission to hospital.

Penny's skin was intact except for a moisture lesion on her sacrum, but was vulnerable to further damage due to immobility.

Penny underwent a decompressive craniectomy procedure on the day of admission and was admitted to ICU. She was placed on mechanical ventilation as she was unable to breathe for herself. She was ventilated initially via an endotracheal tube, then via tracheostomy after three weeks, as respiratory wean was slow due to the severity of her brain injury.

**Penny is not the patient's real name*

Clinical Challenges

Penny was extremely unwell for an extended period of time. Prolonged immobility can cause extensive complications with deconditioning of all body systems, making recovery more difficult and slower. In-bed mobilisation was therefore important, but initially the bed that she was nursed on (Progressa with an integrated surface) was too narrow to turn her fully.

She was switched to a different bed and surface combination (Eleganza 5 bed and Dolphin Therapy fluid immersion simulation) as the staff were concerned about her skin integrity. Dolphin Therapy prevented skin breakdown, but the bed was still too narrow to allow full turning.

Manual handling risks for staff were high, especially with the beds that were too narrow to turn Penny sufficiently. A lot of hands-on moving and handling was required on the standard width beds, which increased staff injury risks and was potentially uncomfortable for Penny.

The unit contacted Medstrom to find out whether there was any alternative equipment available which would meet Penny's needs better.



Patient Objectives

- Slow respiratory wean
- Prevent skin breakdown and reduce other complications of immobility
- Commence rehabilitation

Introduction of Medstrom's Bariatric Equipment Package

Once Penny was stable enough, a package of bariatric equipment was provided to allow easier repositioning, to help reduce complications of immobility including skin breakdown. It was also selected to help reduce moving and handling risks for caregivers:

Bari10A Bed: The Bari10A bed has a safe working load of 475kg and the platform sections widen individually, giving a maximum platform width of 122cm (compared to approximately 90cm for a standard hospital bed). This provides extra space for the patient, but also means caregivers can shorten a section if they want to get closer to the patient to deliver care. This, along with the bed's top height of 86cm, makes caring for the patient safer and easier, reducing injury risks. A one-button cardiac chair enabled Penny to sit up, which was useful when she was extubated to assist her breathing.

TurnCair 1000 Low Air Loss Surface: Dolphin Therapy had prevented skin breakdown and the moisture lesion on Penny's sacrum had healed. It was felt at this stage that stepping down to a surface which assisted with turning would be the most beneficial.

The surface selected was TurnCair 1000. It provides a high specification of support surface for pressure redistribution, plus a TurnAssist feature that enables safe and dignified handling of patients. It also aids respiratory management by helping to mobilise lung secretions. The low air loss feature helps to keep the patient's skin drier and cooler, preventing further skin breakdown and helping existing damage to heal. The AutoFirm feature is useful for lateral transfers as it provides a firm and stable surface to slide the patient to and from.



Following the equipment installation and training on its optimal use from Medstrom, staff found repositioning became a lot easier with reduced manual handling.

Approximately four weeks after admission, Penny had been weaned off mechanical ventilation. She was able to self-ventilate during the day but still required non-invasive ventilation overnight. She was sitting out in a hospital-owned tilt-in-space chair during the day. The chair was able to go to a flat position, allowing staff to perform lateral transfers to and from the bed.

Penny stayed in hospital for a total of 38 days, after which she was discharged to a specialist rehabilitation unit to continue her recovery. She was still transferring to the chair via lateral transfer and unable to weight bear. Her respiratory function was continuing to improve but was a slow process due to the extent of her brain injury. Her skin remained intact other than the moisture lesion which was static. This was helped by the repositioning benefits of the bed and surface. Rehabilitation was underway but slow due to the extent of her injury.



Skin integrity



Improved respiratory function



Rehabilitation underway

One of the registered Nurses caring for Penny commented:

“The **turn function** on the mattress was **extremely helpful** for manual handling and regular reposition changes. It has **taken a load off our backs** and also **saved us a lot of time** and **required less staff.**”

Summary

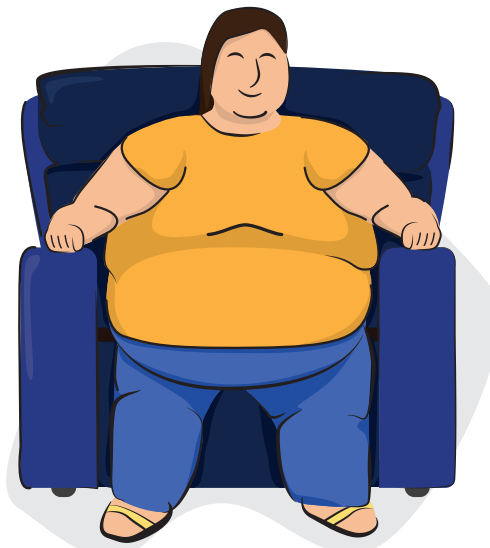
The initial equipment change from the Progressa bed to the Eleganza 5 bed with Dolphin Therapy fulfilled one important need but failed to address a second. The surface provided excellent therapeutic support for Penny, but the bed wasn't wide enough to allow staff to fully turn her.

Dolphin Therapy in an extra-wide size is available, which, at that stage, could have been used with a Bari10A bed. This would have given both the therapeutic surface and bed width that were needed. Once Penny improved, Dolphin Therapy Extra-Wide could have been stepped down to a TurnCair 1000 surface.

It can be difficult to balance the different needs of complex patients like Penny, and in some cases it only becomes obvious that the equipment isn't the most suitable after the patient has started using it. Being able to step up and down quickly addresses this.

Medstrom's Clinical Advisor commented:

“The staff initially felt that the Eleganza 5 bed, due to its ITU-specific benefits and platform lateral tilt, would be the most appropriate for Penny. But it became obvious that **turning her on her side** was still an issue, so I suggested once she was well enough the bed should be **switched to the wider Bari10A**, with the TurnCair 1000 surface if she no longer required Dolphin Therapy.”



To discover more about Medstrom's range of solutions for dignified plus-size patient care and enhanced support for caregivers, contact Medstrom's Bariatric Product Specialists 24/7/365 on:

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