

From Rehabilitation to Home: The Use of the Right Equipment for a Faster Recovery and Improvement of Mobilisation.

- ↑ **Excellent progression in rehab to increase mobility**
- ↑ **Improvements of independence**
- ↓ **Prevention of skin damage**

Introduction

Lisa* (age 72) was admitted to hospital after a serious fall at home. The hospital could not determine an accurate weight for Lisa, but it was estimated to be between 128kg to 140kg. She had no previous medical history.

Prior to admission, Lisa was able to walk at home with a stick and mobilise with the support of her furniture around the house. When outdoors, she would use a mobility scooter to transfer.

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

Clinical Challenges

Upon admission, Lisa's fall had resulted in a broken wrist and a fractured neck of femur, which subsequently required surgery. Due to the fracture and surgery, Lisa was dependent on staff and her mobility was compromised. In addition, Lisa developed skin damage due to the surgery, which was proving difficult to heal.

Lisa's skin integrity was a concern during her rehabilitation process and further breakdown of the wound was deemed possible due to various risk factors.

The overriding risk factor relating to Lisa's skin was its fragile nature, being deemed by staff as 'paper thin'. This was a concern as Lisa was spending long periods of time in bed and staff became worried that friction and shear related skin damage could occur due to the skin's vulnerability.

In March, Lisa had started rehabilitation and it was identified that staff needed equipment that would support Lisa to mobilise so she could engage with rehabilitation activities. Staff also needed assistance with nursing Lisa whilst she was immobile and dependent, therefore mitigating staff manual handling injury was an additional requirement.

This, in addition to the skin integrity concerns, was a key consideration during the equipment selection process.

Patient objectives

- **Improvement of mobilisation**
- **To go home without a care package**
- **To use the upstairs bathroom rather than a commode**



Introduction of Medstrom Bariatric Equipment Package

On admission, Lisa was nursed on a Bari10A bed and TurnCair 1000 mattress. After the assessment from Medstrom's Clinical Advisor, both the Bari10A bed and the TurnCair 1000 stayed in-situ and Lisa did not need to be transferred.

Stage 1:

TurnCair 1000 Low Air Loss Surface: This provides a high specification of support surface for pressure redistribution, plus a TurnAssist feature that enables safe and dignified handling of patients. The TurnAssist helped staff as it allowed for easier turning of Lisa, without the risk of manual handling injuries.

The low air loss surface helped to keep Lisa's 'paper thin' skin dry and cool, to prevent skin breakdown and the development of pressure ulcers. Additionally, the TurnCair 1000 mattress is equipped with an X-treme, multi-stretch cover. The multi-stretch feature absorbs frictional and shear forces, therefore assisted to prevent skin damage.



Bari10A Bed: The Bari10A platform sections widen individually, which gives a maximum platform width of 122cm (compared to approximately 90cm for a standard hospital bed). This provides extra space for the patient whilst allowing the caregivers to shorten individual platforms, in order for them to get closer to the patient when delivering care. The bed's top height of 86cm, would also make caring for patients easier and safer, with the reduction of injury risks.

Given Lisa's immobile condition at this stage, she was dependent on the staff. With the use of Bari10A the caregivers are able to reach Lisa easier, closer and in a safer approach. Furthermore, if Lisa felt clinically able to mobilise she could use the robust side rail as a supporting aid when self-mobilising.

Stage 2: Step down

After a few months of recovering from her broken wrist and fractured hip, the discussion was initiated between the rehabilitation centre, Lisa and Medstrom's Clinical Advisor about her next steps leading to recovery and mobilisation. It was agreed that she should start rehab and sit out of bed for a faster discharge. This therefore resulted in a change of equipment to accommodate a 'stepped down' approach.

MMO 8000 Bed: This bed has a platform of 110cm which gave Lisa the space for her to move safely and comfortably.

The bed also provides an ultra-low height of 21cm which allows 96% of UK female population to mobilise safely off the bed. When Lisa was able to get out of bed, she was able to adjust the bed's customisable, programmable optimum egress height which allowed a safe exit off the bed and mobilisation at Lisa's popliteal height¹. Additionally the maximum platform height is 83cm which provides a safe height for 98% of UK adults. This avoids manual handling risks, when they are providing care for the patient.



P.R.O. Matt Plus Extra-Wide Surface: This mattress provides a semi-dynamic therapy mode that allowed Lisa to be immersed, reducing the build-up of pressure over bony prominences. Furthermore, the AutoFirm mode provided a stable surface which made the mobilisation and repositioning for Lisa easier and safer, reducing shear and friction. This also decreases the risk of manual handling injury for the caregiver when doing nursing procedures.

Bariatric Commode/Shower Chair: This equipment allowed Lisa to use the toilet and have a shower with privacy and dignity.

Bariatric Rotunda: To assist Lisa with standing up and transferring to her Bariatric Commode, a Bariatric Rotunda was used for an easier and safer transfer.

Dynamic seat cushion: This cushion is suitable for both 71cm and 81cm static chairs with a maximum patient weight of 350kg. As the dynamic seat cushion was transportable, Lisa was able to move around with the cushion at the rehabilitation centre independently. She also found that the cushion was comfortable enough for her to sit up for a longer time, which increased her mentality and mood.



Medstrom's Clinical Advisor commented:

“After Lisa’s admission, I was called for an assessment to advise the staff on appropriate equipment for Lisa’s needs. It was then agreed that she was **on the right equipment** considering her injuries and skin condition. When Lisa started rehabilitation, a step down of equipment was discussed between her, the rehab team and I. I suggested the MMO 8000 bed with its **ultra-low height** which can be **adjusted to Lisa’s popliteal height for a safe mobilisation**. The dynamic seat cushion allowed Lisa to be **autonomous and independent** around the rehab centre. This **increased Lisa’s mood** significantly, and she began to progress really well. She commented how much she liked the seat cushion and how she found it **very comfortable**.”

Summary

At the start of Lisa’s recovery journey, she was immobile and dependent on the staff. Towards the end of her rehabilitation stage she had progressed positively in her mobilisation, increased her independence and prevented any skin damage from occurring, despite staff being concerned that Lisa was at very high risk. The ‘step down’ method whereby equipment was changed as and when Lisa’s clinical condition improved was incredibly successful and ensured equipment was tailored to meet Lisa’s specific clinical needs.

The support from Medstrom’s Clinical Advisor and the appropriate selection of equipment assisted with the development of this patient, with particular emphasis placed on the dynamic seat cushion towards the end of Lisa’s admission as she felt it made her more self-efficient and boosted her morale. The rehabilitation centre since went on to purchase a dynamic seat cushion for future patients due to the success with Lisa.

Overall, this case study acknowledges the fundamental importance of selecting the right equipment, for the right patient, at the right time.

References

1.Martindale D (2021). Calculating bed height for hospital patients using popliteal measurement. Nursing Times [online]; 117: 10.

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:

UK: 0845 371 1717 or info@medstrom.co.uk IRE: 01 686 9487 or info@medstrom.ie