



Recovery Pre-and Post-Surgery: How Provision of the Right Equipment on Admission Contributed to Uncomplicated Recovery



Early, safe mobilisation



Comfort



Faster rehabilitation for earlier hospital discharge

Introduction

Janet* (age 72) was admitted to hospital for a total hip replacement following a fracture. She weighed 116kg on admission, and had the following comorbidities/past medical history:

- Hypertension
- Chronic kidney disease
- Meningioma
- Left total hip replacement
- Right total knee replacement

Prior to admission, she was mobile with a walking frame.

On admission, her skin was intact, but her sacrum was red and her skin was vulnerable due to her being immobile.

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

Clinical Challenges

Janet waited five days for surgery after admission. It was extremely important that she could be as mobile as possible in bed (within the limitations of her hip fracture) and then start mobilising as soon as she was physically able following surgery. Any prolonged mobility loss would cause deconditioning, making regaining her baseline mobility more difficult.

Janet's skin was also vulnerable due to immobility, but she would need a surface that allowed easy mobilisation.

Patient objectives

- Early mobilisation
- Comfort
- Prevent skin damage
- Uncomplicated recovery from surgery



Introduction of Medstrom's Bariatric Equipment Package

Accident and emergency contacted Medstrom's Clinical Advisor as soon as Janet arrived. An assessment was carried out and the following equipment was delivered on the same day:

MMO 8000 Bed: This bed's platform is 110cm wide (compared to 90cm for a standard hospital bed). The extra width gave Janet more room, to help with in-bed mobilisation and comfort. It also helped with caregiver access, reducing moving and handling risks.

The backrest on the bed has a 2D elliptical movement, which mimics spine elongation as a person sits up and stops them being pushed down the bed. This was important for Janet as it helped protect her fractured hip when the backrest was moved. It also has safe stops at 30° and 45° which aided safety for Janet because of her hip fracture.



The bed's ultra-low height of 21cm allows over 96% of females to mobilise safely, and the customisable optimum egress height allowed safe mobilisation to and from the bed from Janet's popliteal height¹ every time she got out of bed, with her feet flat on the floor. Additionally, the electric height adjustment of the bed could be used to assist Janet to stand. The custom height and ultra-low height of the bed helped to reduce the risk of falls and associated injuries.²

P.R.O. Matt Plus Extra-Wide Surface: This surface can be used in non-powered mode, or powered mode with the addition of an air supply unit. It was used in non-powered mode for Janet. Non-powered mode is able to achieve a pressure profile similar to that of a dynamic air mattress. This offers significantly higher therapy than a foam mattress and a traditional hybrid system and means patients are protected immediately. Post-surgery, the surface provided a stable and safe seat when Janet was mobilising to and from the bed, preparing her for hospital discharge.

Janet had her own walking frame which was brought in from home for her to use.

Following the equipment installation and training on its optimal use from Medstrom for both Janet and the staff, in-bed mobilisation could be carried out safely and frequently, helping to reduce the negative consequences of immobility.

Two days post-surgery, Janet started standing initially, then mobilising with the physiotherapists using her walking frame. Both the bed and mattress facilitated this, as described above.

Janet was discharged home 11 days after surgery. She was now mobilising independently. She wasn't quite back to her baseline due to the after-effects of her surgery, but she was improving daily and would continue to recover at home. All objectives for her had been met; early mobilisation was achieved both in bed and out of bed following surgery. She was comfortable on the bed and mattress provided, her skin was intact and no longer red and her recovery was uncomplicated.



Early, safe mobilisation



Comfort



Uncomplicated recovery

Summary

The equipment package provided for Janet was key to her recovery. It allowed early mobilisation and gave sufficient room for her to be able to move and be cared for safely.

Also key was getting the equipment to her on the day of admission. If she'd had to wait a few days for it, that could have been detrimental and slowed her recovery. For example, if a bed is too narrow for a patient, moving and turning them is more difficult and limited, increasing risks to both the patient and staff. A bed without an elliptical backrest can push a person down the bed as the backrest rises. As well as increasing shear and friction on the shoulders, sacrum and heels, in Janet's case it could have caused pain and more damage to her hip.

The right equipment, provided at the right time, is key to early mobilisation and improved outcomes.

References

1. Martindale D (2021). Calculating bed height for hospital patients using popliteal measurement. Nursing Times [online]; 117: 10.
2. Martindale D (2022) Using gravitational potential energy to assess the risk of falls from bed. Nursing Times [online]; 118: 2.



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