



The MMO 8000 Bed & Bariatric Static Chair Facilitated Early Mobilisation Following Step-down from Critical Care

- ↑ **Easy upright positioning for improved respiratory management**
- ↓ **Reduced moving and handling risks for staff**
- ↑ **Medically fit for discharge three days after step-down from critical care**

Introduction

Tony* (age 44) was admitted to hospital due acute Type 2 respiratory failure. He was critically ill, so was admitted straight to critical care where he was placed on mechanical ventilation. He weighed 180kg and had the following comorbidities:

- **Sleep apnoea**
- **Oxygen therapy (only when sleeping at home)**
- **Previous Type 2 respiratory failure**
- **Cellulitis**

Prior to becoming unwell, which resulted in this hospitalisation, Tony was mobile with the aid of a walking frame and self-caring.

On admission, Tony had cellulitis on both legs which was already being treated and healing. He also had moisture lesions on his sacrum and groins. In critical care he was nursed on a standard width bed and alternating pressure mattress. His skin was vulnerable as he was unable to move himself whilst ventilated, so was completely reliant on caregivers for positional changes

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

Clinical Challenges

In critical care, the aim was to treat the respiratory failure so that Tony was mechanically ventilated for as short a time as possible. He responded well to treatment and was successfully extubated four days after admission. He remained in critical care for a further four days before being transferred to a ward.

After Tony was extubated in critical care, he was unable to mobilise from the bed because it didn't go to a low enough height for him to do so safely. In addition, mobilisation within the bed was challenging because it wasn't wide enough. This placed both caregivers and Tony at risk of injury and restricted his mobility.



Medstrom were asked to carry out an equipment assessment on the same day that Tony was being transferred to the ward. Equipment was required which allowed safe mobilisation both in and out of bed and preserved skin integrity. This was extremely important, as Tony had already been in bed for eight days and needed to improve his mobility as quickly as possible to prevent long-term complications.

Medstrom's Clinical Advisor commented:

"It was clear from my assessment that Tony **urgently needed equipment** to allow him to start to safely mobilise. He had been completely **self-caring at home**, but was **in real danger of losing that ability**. We delivered the **equipment to the ward on the same day** as his assessment and trained the staff on its use, so it was installed and waiting for him when he was transferred from critical care."

Tony commented to Medstrom's Clinical Advisor:

"I'm really **looking forward** to getting out of bed and **sitting in a chair**. I've been in bed for over a week and feel ready to get up now **so I can get well enough to go home.**"

Patient Objectives

- **Treat acute respiratory failure**
- **Prevent complications of immobility**
- **Early mobilisation following transfer from critical care to ward**
- **Prevent skin damage**
- **Achieve "Medically fit for Discharge" status**

Introduction of Medstrom's Bariatric Equipment Package

A bariatric bed and surface were provided which would allow Tony to mobilise both within the bed and to and from it, and help to maintain skin integrity:

MMO 8000 Bed: This bed has a platform width of 110cm (compared to approximately 90cm for a standard bed). This gave sufficient width for Tony to move safely and comfortably and reduced moving and handling risks for caregivers, giving them better access and more room to help Tony move.

The bed's ultra-low height of 21cm allows over 99% of the UK male population to mobilise safely, and the customisable optimum egress height allowed safe mobilisation to and from the bed at Tony's popliteal height¹ every time he got out of bed.

The high height of the platform (83cm) provides a safe height for 98% of UK adults to work from without twisting or stooping, reducing manual handling risks.

P.R.O. Matt Plus Extra-Wide Surface: In powered mode, this surface provided continuous low pressure, giving excellent immersion, and helping to prevent skin damage. The Auto Firm mode provided a stable and safe surface when Tony was mobilising to and from the bed.

Static Bariatric Chair with Apollo Dynamic Seat Cushion: The chair allowed Tony to sit safely and comfortably out of bed, and to safely mobilise from his popliteal height. The seat cushion helped to maintain skin integrity when he was out of bed, providing alternating pressure in a 1 in 2 cycle.

With the extra width provided by the bed, in-bed mobilisation became instantly easier. Tony was able to move himself using the bed controls, giving him more independence.

The day after admission to the ward, Tony was able to stand and transfer from bed to chair with the assistance of a physiotherapist. Three days after admission to the ward, Tony was medically fit for discharge. These were excellent achievements considering he had been mechanically ventilated in critical care and, up to transferring to the ward, bed bound.

All objectives for Tony had been met; the acute episode of respiratory failure had largely resolved and early, safe mobilisation had been achieved on the ward which helped to prevent further complications of immobility. The moisture lesions were documented as healing and Tony was deemed medically fit for discharge.



Complications prevented



Skin intact



Medically fit for discharge

Summary

Provision of suitable equipment on the ward was extremely important for Tony, as he had been bed bound for 10 days in critical care. Deconditioning is one of the most common reasons for prolonged length of stay in hospitals,² and can result in long-term detrimental effects to mobility and all body systems. The equipment combination which Tony received allowed early, safer and easier mobilisation on the ward, and ultimately an earlier discharge. Reducing length of stay is beneficial both for the patient who would much rather be at home, and financially; a recent systematic review reported that delayed discharges cost between £200 to £565 per patient, per day.³

Tony could stand and transfer at discharge, but he wasn't yet walking. A care package was arranged which included ongoing rehabilitation at home, with the aim of getting him back to his pre-admission levels of health and mobility.

Shortly before discharge, **Tony commented to Medstrom's Clinical Advisor:**

"The bed and chair are **comfortable**, and the bed controls are **easy to use**. It's been great to be able to get up and sit in the chair. **It's made me feel better and given me the confidence to go home.**"



Well-being



Comfort



Confidence

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

References:

1. Martindale D (2021). Calculating bed height for hospital patients using popliteal measurement. *Nursing Times* [online]; 117: 10.
2. Lim SC et al (2006) Factors causing delay in discharge of elderly patients in an acute care hospital. *Annals of the Academy of Medicine, Singapore*; 35: 1, 27-32.
3. Rojas-García A, Turner S, Pizzo E, et al. Impact and experiences of delayed discharge: a mixed-studies systematic review. *Health Expect* 2018;21:41–56.