

From ICU to Hospital Discharge: Using the Right Chairs to Facilitate Recovery at Different Stages of a Spinal Injury Patient's Journey

- ↑ **Core stability improved through sitting out of bed**
- ↑ **Sit-to-stand achieved**
- ↑ **Mobilisation achieved, leading to discharge home**

Introduction

Nigel* (age 58) was admitted to hospital with a C5 – C7 spinal fracture following a motor vehicle collision. He weighed 160kg on admission. His only comorbidity of note was type 2 diabetes.

Prior to admission, Nigel was fully mobile and independent, and his skin was intact. On admission he was immobilised due to the unstable fracture and admitted straight to ICU from Accident & Emergency.

He spent six weeks in ICU and was then stepped down to a spinal ward.

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

Clinical Challenges

Nigel was wearing a full metal neck brace when he was transferred to the spinal ward and had been bedbound up until the bariatric equipment was introduced. He was on a standard width bed, which was suitable for him due to his morphology.

The physiotherapy and occupational therapy teams on the ward wanted to help Nigel rebuild his core strength and stability without causing any pain or extra stress on his neck. To do this they wanted to be able to sit him out of bed in a chair which supported his back and neck. This would act as the precursor to him being able to stand and mobilise again.

Patient Objectives

- **Comfortably and safely sit out of bed**
- **Build core stability**
- **Progress to standing and mobilising as quickly as possible**
- **Achieve 'medically fit for discharge' status**

Introduction of Medstrom's Bariatric Equipment Package

Medstrom's Clinical Advisor met with the multi-disciplinary team and Nigel to discuss the best way to achieve the objectives for him. It was decided that the bariatric tilt-in-space chair would be the most suitable at that point:



Bariatric Tilt-in-Space Chair: This chair is often used for high dependency, non-mobile patients who are sitting out after a period of bedrest.

The chair has a long, stable, supportive backrest which would help keep Nigel's upper body supported and well-aligned. The head support pillow on the chair was removed to keep his neck better aligned, as it would be naturally if he were standing.

The 28" seat depth was wide enough to accommodate Nigel comfortably and if he did need extra room, the arms could be splayed to increase the width to 32".

The chair is compatible with a hoist, but when staff had hoisted Nigel previously, he had become distressed. The chair was therefore placed in a flat position with the arms and wings folded down, which enabled the staff to perform lateral transfers. Nigel was much happier with this method of transfer.

Nigel utilised the tilt-in-space chair for five weeks. His core strength at that point had improved significantly, and he was ready to start practicing sit-to-stand.

Stepping Down ↓

In order to practice sit-to-stand, it was decided the bariatric riser-recliner chair would be the most suitable.

Bariatric Riser-Recliner Chair: This would assist Nigel to stand by utilisation of the electrically operated forward tilting mechanism. It could also be used for repositioning such as leg elevation and backrest adjustments.

Initially the tilt-in-space chair was utilised in conjunction with the riser-recliner chair, to ensure Nigel was ready for sit-to-stand practice. This also gave him confidence that the tilt-in-space chair, which he liked and had got used to, was still there should he need it.

Both chairs have a seat cushion, which conforms to the shape of the patient. Nigel found both to be very comfortable and his skin remained intact throughout.

Nigel managed to achieve sit-to-stand quickly, and after a few days the tilt-in-space chair was taken away.

Nigel was discharged from hospital three weeks after the introduction of the riser-recliner chair. He was in hospital for a total of 14 weeks. He could stand and mobilise at the time of hospital discharge, with his mobility and independence increasing daily.

All objectives for Nigel were met; he could sit out of bed, stand, mobilise and was well enough to go home.



Core strength rebuilt



Mobility regained



Discharged home

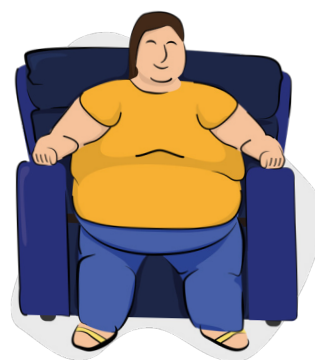
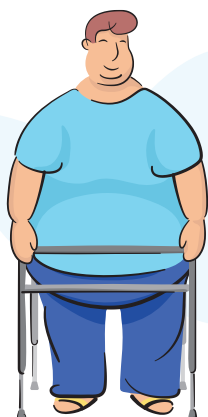
Summary

The use of the two different chairs at the right time was key to Nigel's recovery. The tilt-in-space chair helped him to get out of bed, gave physical and psychological benefits and helped to improve his core stability whilst keeping his spine in alignment.

Once his core strength had been sufficiently built up, stepping him down to the riser-recliner enabled him to start standing and mobilising. To be medically fit for discharge just three weeks after starting to use this chair was an excellent achievement.

Medstrom's Clinical Advisor commented:

"It was **so rewarding** to see the improvements Nigel made, which in the end **enabled him to go home**. The outcome he achieved wouldn't have been possible without these chairs. I was so pleased to be able to step in and help, as the Trust's usual supplier of bariatric equipment wasn't able to provide any chairs."



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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