

## Complex Rehabilitation: The TurnCair 1000 Surface Helped Repositioning, Pressure Area Care and Reduced the Number of Staff Required to Move the Patient

- ↑ Pressure ulcers healing
- ↑ No new skin breakdown
- ↓ Reduction of 50% in number of staff needed to move the patient

### Introduction

Steve\* (age 24) was admitted to a specialist rehabilitation centre from an acute hospital following critical illness which resulted in neuropathy and myopathy.

On admission Steve weighed 152kg. Prior to hospital admission he was mobile, but he had been immobile since his acute hospital admission, and was being hoisted for repositioning.

His past medical history/comorbidities included:

- Anaemia and vitamin B12 deficiency
- Depression
- Sleep apnoea
- Corneal dystrophy

Since hospital admission, Steve was catheterised for urinary management but incontinent of faeces. This made him highly vulnerable to pressure damage, and on admission to the rehabilitation centre he had a Category III pressure ulcer to his sacrum, moisture lesions on his back, a Category II pressure ulcer to his left heel, and both heels were red.

*\*Steve is not the patient's real name*



### Clinical Challenges

Steve was at risk of further deconditioning as a result of being immobile, so being able to reposition and turn him in bed was important. Repositioning Steve also had to be safe for staff, so any products used needed to assist this and reduce manual handling risks.

His skin was extremely vulnerable, and he needed a surface which would assist with healing of existing damage and prevention of new.

### Patient Objectives

- Improve mobility
- Heal existing skin damage and prevent further skin breakdown

## Introduction of Medstrom's Bariatric Equipment Package

**MMO 8000 Bed:** This bed has a platform width of 110cm (compared to approximately 90cm for a standard width bed). This gave more room for Steve to move and for staff to reposition him. The one button cardiac chair function was useful to sit Steve upright in bed, giving physical and psychological benefits.

When Steve needed to be hoisted, the open 'A' frame of the MMO 8000 bed gave unrestricted hoist access, for easier and safer handling.

The bed has an elliptical backrest movement which mimics the way a person's spine elongates when they go from a lying to sitting position. It helps to prevent pushing the patient down the bed as they sit up, which stops shear and friction on the patient's sacrum and heels. This was particularly beneficial for Steve as he already had sacral and heel pressure ulcers.

The high height of the bed platform is 83cm. This provides a safe working height for 98% of UK adults,<sup>1</sup> reducing manual handling risks.

**TurnCair 1000 Low Air Loss Surface:** This provides a high specification of support surface for pressure redistribution.

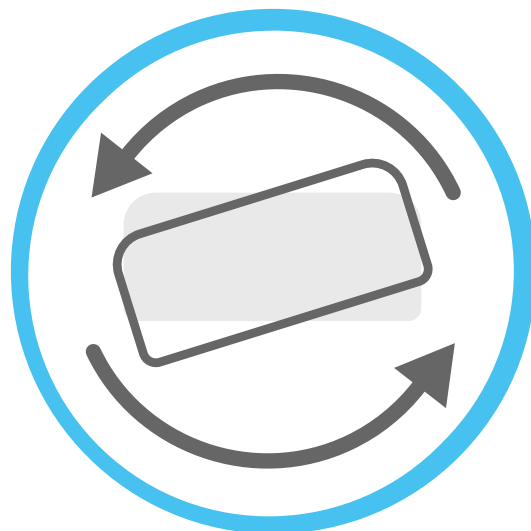
The surface also includes a TurnAssist feature that allows safe and dignified handling of the patient and can be programmed to gently turn the patient at set intervals. This was beneficial both for Steve's comfort and for manual handling.

The low air loss feature helped to keep Steve's skin dry and cool, which in turn helped with healing and preventing further breakdown.

Steve had his own wheelchair and cushion. A hoist was used to transfer him between these and the bed.

At the time of writing this case study, Steve had been in the rehabilitation centre for two months. He was still unable to weight bear, but had been able to spend longer out of bed. His in-bed mobility had also improved as a result of the electric bed movement and the repositioning using the surface. The number of caregivers needed to reposition Steve had **reduced by 50%** from four to two, due to the turning surface.

All objectives for Steve had been met; his mobility had improved, he was comfortable on the bed and mattress and he had not developed any new pressure damage. The moisture lesions on his back and the Category II pressure ulcer on his heel had healed, and the Category III pressure ulcer on his sacrum had granulated to the surface and was healing.



**Improved mobility**



**Skin healing**



**No new skin breakdown**

## Summary

Steve had complex needs, and it was extremely important that the equipment package he was given addressed those.

The MMO 8000 electric profiling bed provided sufficient width to be able to move Steve safely, and provided effortless positioning via the controls. The surface helped with gentle turning and repositioning of Steve, which helped with pressure redistribution. Together with the low air loss feature, this helped to prevent further skin damage and with healing existing damage.

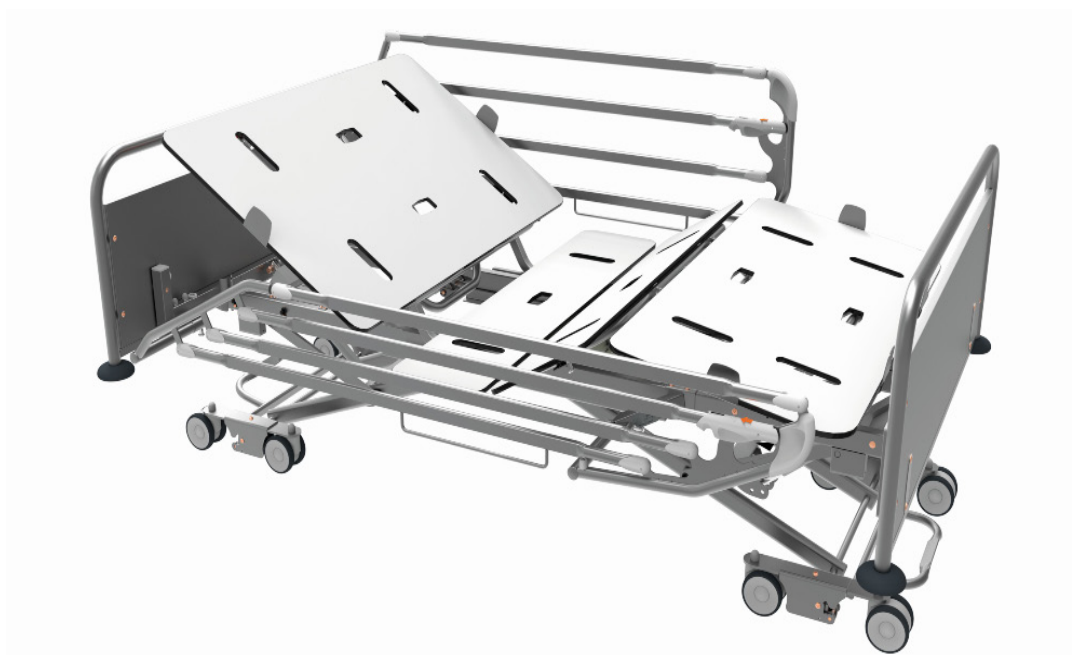
The reduction from four to two members of staff freed up time and reduced moving and handling risks.

### The unit's Clinical Manager commented:

"I feel the **mattress has really benefitted Steve**, especially in relation to his skin. I'm very pleased with how **his skin has improved**. I wasn't expecting his skin to be as good as it is now because of his very limited mobility. Being able to use the bed and mattress to reposition Steve has **really helped us** too. They are both **easy to use**."

### References

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



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