



How an Equipment Change Benefited a Patient Physically & Psychologically, Improving Pre-Admission Mobility

- ↑ **Easy upright positioning for improved respiratory management**
- ↑ **Increased patient independence and improved mobility**
- ↑ **Major psychological benefits**

Introduction

Keith* (age 56) was admitted to hospital with pneumonia. He was treated with IV antibiotics successfully for this, but then developed COVID-19 infection. He weighed 171kg and had the following comorbidities:

- **Hypertension**
- **Leg ulcer**

Prior to admission, Keith could stand and transfer from one surface to another, but not walk more than a few steps.

On admission Keith had one leg ulcer which was being dressed by district nurses at home. His sacrum had areas of redness and blanching, and his skin was vulnerable to damage as he was bed bound on admission, in a bed that wasn't wide enough to allow him to turn safely.

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



Clinical Challenges

Keith needed to be in an upright position for optimal respiratory management. Initially this proved very difficult because his bed was too narrow, and he found it very uncomfortable. It placed both Keith and his caregivers at risk of injury.

Early mobilisation was important to prevent complications of immobility. A new package of bariatric equipment was provided the day after admission to make both in-bed and out-of-bed mobilisation easier, and to prevent any further skin damage developing.

After Keith developed COVID-19 infection, respiratory management and upright positioning remained critically important. In addition, it was important that he didn't lose the mobility gains he'd made prior to developing COVID-19 infection.

Patient Objectives

- **Treat pneumonia**
- **Prevent complications of immobility**
- **Early, safe mobilisation**
- **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 Keith 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 Keith to move safely and comfortably.

The bed’s ultra-low height of 21cm allows over 99% of the UK male population to mobilise safely. The customisable, programmable optimum egress height allowed safe mobilisation to and from the bed at Keith’s popliteal height¹ every time he got out of bed. This eliminates guesswork and allows safer mobilisation, reducing the risk of falls.

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 Keith was mobilising to and from the bed.

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

Bariatric Walking Frame: The extra-wide frame assisted Keith to firstly stand and then walk.



In-bed mobilisation became much easier due to the extra width provided by the bed. Keith was able to move himself using the bed controls, giving him more independence.

Keith transferred from his bed to chair with assistance and using a walking frame on the same day the equipment was delivered. Sitting on the chair made breathing and coughing easier, aiding his recovery from pneumonia.

Keith stayed in hospital for 22 days in total. His COVID-19 infection didn’t cause severe symptoms, and he was able to carry on with his mobilisation programme without losing any of the mobility he’d gained back since admission. On discharge, he was able to walk to the bathroom in his side room and back using his walking frame. This was a considerable improvement on his pre-admission mobility, and a key achievement for him.

All objectives for Keith were met or exceeded; he recovered from both pneumonia and COVID-19 infections and improved his mobility compared to pre-admission. His leg ulcer and sacrum were documented as healing, and he was deemed medically fit for discharge.



Pneumonia resolved



Skin intact



Mobility better than pre-admission

Summary

The correct package of equipment was essential to both treat Keith's acute illness and assist with early mobilisation. For Keith, early mobilisation and upright positioning were particularly important to manage his respiratory issues and to prevent other complications of immobility which could have had long-term detrimental effects.

After Keith had been using the equipment for several days, **Medstrom's Clinical Advisor had a conversation with him to gain his feedback:**

CA: What's your experience of the equipment you are on now compared to when you were first admitted?

Keith: **I felt like I was trapped in a coffin on the first bed!** It's **so much better now** to be able to move round in bed and turn on my side.

CA: What do you like about the equipment you have now and is it meeting your needs?

Keith: When I was admitted I was **stuck in bed** and **too scared to sit in the chair**. At home I like to sit in a chair, but the original chair I was given in hospital looked too narrow and I was worried I'd get stuck if I sat in it. The equipment I have now **helps me be more independent** – I don't have to keep asking the nurses for help.

CA: Have you been shown how to use the bed?

Keith: Not really, but I've worked out how to use the controls, they are **easy to understand**.

CA: Would you like me to go through the controls with you and give you some tips to make the most of the bed using them?

Keith: Yes please.



Well-being



Comfort



Independence

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