



Recovery from Pneumonia: Recovery of a Patient Assisted by Providing the Right Equipment at the Right Time

- ↑ **Easy upright positioning for improved respiratory management**
- ↑ **Mobilisation to chair when physically able**
- ↑ **Major improvement in respiratory function in short time**

Introduction

Harriet* (age 61) was admitted to hospital with pneumonia for treatment with IV antibiotics. She weighed 133kg and had the following comorbidities:

- **Sleep apnoea**
- **Atrial fibrillation**
- **Cardiovascular disease**

Harriet was on long-term oxygen therapy at home. She could stand and transfer but wasn't able to walk, so at home used a wheelchair to move around.

On admission Harriet's heels were red, and her skin was vulnerable to damage as she was bed bound.

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



Clinical Challenges

Harriet needed to be in an upright position for optimal respiratory management. Initially this proved difficult because she was on a standard width bed, and it was difficult to move her into the correct position because of a lack of space for turning her. It potentially placed both Harriet and her caregivers at risk of injury.

In-bed early mobilisation was important to prevent complications of immobility. This was difficult initially because the bed wasn't wide enough for Harriet. The ward manager also wanted to get Harriet up out of bed and into her wheelchair as soon as she was well enough, so that her pre-illness level of mobility was restored, and she didn't lose any more of her independence. A bariatric bed and surface were provided initially to make in-bed mobilisation easier. Once she was well enough, a chair and cushion were provided so Harriet could sit out of bed.

Patient Objectives

- **Treat pneumonia**
- **Be able to move comfortably in bed**
- **Prevent skin damage**
- **Once well enough, sit out of bed and use wheelchair**

Introduction of Medstrom's Bariatric Equipment Package

A bariatric bed and surface were provided which would allow Harriet to mobilise both within the bed and to and from it once well enough, 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 Harriet to move safely and comfortably and reduced manual handling risks for staff as there was now more room to work safely.

The bed's ultra-low height of 21cm allows 96% of the UK female population to mobilise safely. Once she was well enough to get out of bed the customisable, programmable optimum egress height allowed safe mobilisation to and from the bed at Harriet's popliteal height¹ every time she 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 Harriet was mobilising to and from the bed.

Static Bariatric Chair with Apollo Dynamic Seat Cushion: The chair allowed Harriet to sit safely and comfortably out of bed, and to safely stand and transfer. The alternating pressure seat cushion helped to maintain skin integrity when she was out of bed.



Harriet also had her own wheelchair which was brought in from home.

In-bed mobilisation became much easier due to the extra width of the bed. Harriet was able to move herself using the bed controls, giving her more independence. The bed was placed in a cardiac chair position to help with respiratory management.

Two days after Harriet had been using the new bed and mattress, she asked if she could get out of bed. Her physiotherapist believed she would benefit from sitting in a chair for part of the day, not just in her wheelchair, as this is what she does at home. The chair and seat cushion were installed the following day, and Harriet managed to stand and transfer from her bed to the wheelchair, then to the chair, without any problems.

Before Harriet started getting out of bed, her respiratory function had improved considerably. Once she started getting out of bed, the improvement was more rapid. Sitting on the chair made breathing and coughing easier, aiding her recovery

from pneumonia. Five days after getting out of bed for the first time, she was discharged home. She spent 12 days in total in hospital.

All objectives for Harriet were met; she recovered from pneumonia, was comfortable on the equipment she was given, regained her pre-illness levels of mobility and her skin integrity was maintained, with her heels improving.



Pneumonia resolved



Skin intact



Pre-admission mobility maintained

Summary

The correct equipment, provided at the correct time assisted with Harriet's recovery. Upright positioning was very important whilst she was in bed, and the MMO 8000 bed allowed that easily, and allowed caregivers to move her safely.

When she was ready, a chair and cushion were delivered, enabling Harriet to get out of bed and transfer in her wheelchair to the chair and vice-versa. This is her normal routine at home, so was good preparation for hospital discharge.

Harriet's respiratory function improved vastly between admission and discharge (12 days). This was an excellent achievement given how unwell she was when she was admitted.

Early mobilisation and reduced length of stay benefits both patients and the NHS. The End PJ Paralysis² campaign in 2018 which focused on getting patients up, dressed and moving, showed that there was a reduction in falls, length of stay and pressure ulcers, along with an improvement in patient experience. It gained the NHS 710,000 days by mobilising patients sooner. Harriet's determination to get out of bed as soon as she was feeling well enough very likely contributed to her rapid recovery and discharge home just a few days later.

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

"I'm really thankful that the chair was brought in. **It's comfortable and I feel secure in it.** I really wanted to get out of bed so I could **get well enough to go home** as soon as possible. I've had no problems with any of the equipment that you have provided."



Well-being



Comfort



Pre-admission mobility

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. Stephenson, J (2018). Campaign to "end PJ paralysis" saved 710,000 hospital days. Nursing Times. <https://www.nursingtimes.net/news/hospital/campaign-to-end-pj-paralysis-saved-710000-hospital-days-21-08-2018/>