



Dignity and Choice: The Right Bed and Surface Combination Helped a Patient to Recover Who Declined to Sit in a Chair

- ↑ In-bed mobilisation, reducing deconditioning and aiding respiratory management
- ↓ Reduced moving and handling risks for staff
- ↑ Patient's choices respected and adhered to

Introduction

Nicole* (age 40) was admitted to hospital for treatment of sepsis caused by cellulitis. She was also suffering from acute kidney injury. She weighed 170kg on admission, and had the following comorbidities/past medical history:

- **Obstructive sleep apnoea**
- **Cor pulmonale**
- **Depression**

Prior to admission Nicole was mobile with assistance and a walking stick for short distances. She had a package of care at home, with two carers visiting in the morning and evening.

On admission, Nicole had cellulitis on both legs. Her skin was otherwise intact but vulnerable to damage due to immobility and her medical status.

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

Clinical Challenges

Nicole was bedbound, initially because she was too unwell to get up, and later because she chose not to get out of bed. She was therefore at risk of deconditioning through complications of immobility. The staff caring for her had to find a way to manage her needs within the confines of the bed.

Nicole's respiratory comorbidities were a challenge to manage while she was confined to bed. Ideally, a person would stand and sit in a chair to help expand the lungs more fully, but as Nicole stayed in bed she needed to be as upright as possible for respiratory management.

Nicole's immune system was already needing help to deal with the sepsis and cellulitis, and he was vulnerable to further infection including sepsis as a result. Good nutrition and hydration were important to help prevent this.

Patient objectives

- **Treat infection**
- **Prevent complications of immobility**
- **Provide comfort**
- **Early mobilisation when well enough**



Introduction of Medstrom's Bariatric Equipment Package

For the first four weeks of Nicole's hospital admission, she was nursed on a standard hospital bed and surface. The ward she was on initially was not aware that bariatric equipment was available. She was then moved to a different ward, where the staff knew that specialist equipment could be brought in. They saw that the bed and surface Nicole was on were not wide enough and arranged for Medstrom's Clinical Advisor to carry out an assessment.

A bed and surface were provided to best manage Nicole's needs:

MMO 8000 Bed: This bed's platform is 110cm wide (a standard hospital bed is approximately 20cm narrower). The extra width gave Nicole more room, to help with in-bed mobilisation and comfort.

The electric controls combined with the extra width meant Nicole could be repositioned more easily and could reposition herself. A one button chair position allowed upright positioning, helping with respiratory management and providing gravitational benefits to help reduce complications of immobility. Upright positioning also facilitated eating and drinking, to help maintain hydration and improve nutritional status, which would help build up Nicole's immune system. Moving and handling risks for staff were reduced.



The high height of the bed (87cm + 14cm mattress = 97cm) also reduced moving and handling risks as it allows almost everyone to work from their umbilical height, eliminating stooping.

The backrest on the bed has a 2D elliptical movement, which mimics spine elongation as a person sits up and stops them being pushed down the bed. This provided comfort for Jeff and reduced the amount of repositioning required from the caregivers, again reducing moving and handling risks.

The bed is able to be programmed to stop at the patient's optimum egress height, with their feet flat on the floor.¹ This, along with the platform low height of 21cm and the ability to raise the bed height using the electric controls, allows more patients to safely mobilise more quickly.

P.R.O. Matt Plus Extra-Wide Surface: This surface can be used in non-powered mode, or powered mode with the addition of an air supply unit. It was decided to use it in powered mode for Nicole initially because she was still very unwell. In non-powered mode, it is able to achieve a pressure profile similar to that of a dynamic air mattress. However, if the patient requires a 'step up', a control unit can be added, converting the system to powered therapy and uniquely offering both alternating and continuous low pressure. The continuous low pressure helped to keep her skin cooler and drier. Once Nicole started to improve, the mattress was stepped down to non-powered mode by simply removing the control unit.

Following the equipment installation and training on its optimal use from Medstrom, in-bed mobilisation could be carried out safely and frequently, helping to reduce deconditioning and complications.

When Nicole was moved to the new ward, she was suffering from multiple organ dysfunction, particularly with worsening liver and kidney function. She was too unwell at this stage to get out of bed. However, a week later she had improved enough that the clinical team felt she was well enough to sit out in a chair. They proposed to move her from bed to chair initially using a mobile hoist, but she didn't want to sit out of bed and declined to do this. The risks of not getting out of bed were explained to her, but she said she was comfortable in bed and wanted to stay there.

The multi-disciplinary team continued to work with Nicole over the next two weeks. Although she was still declining to sit out in a chair, she was practicing sit-to-stand with staff using the bed's electrical height adjustment to assist.

Nicole stayed in hospital for a total of 50 days before being discharged home with an enhanced package of care. Some objectives for her had been met, but not all; the sepsis and cellulitis had been treated, and her liver and kidney function had improved, but not back to pre-admission levels. The multi-organ dysfunction was very likely exacerbated by Nicole remaining bedbound, but as she didn't want to get up the staff had to try to manage this the best they could using the bed. The early mobilisation goal was also not achieved, again due to Nicole's choices, but it was positive that she agreed to, and was able to sit to stand before going home.



Patient choice



Comfort



Dignity

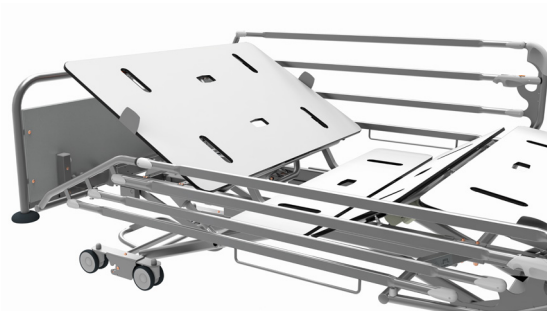
Summary

A particular challenge when caring for Nicole was respecting her wish to remain in bed whilst trying to prevent further deconditioning. The bed and surface provided in-bed movement and mobilisation, including upright positioning which helped with respiratory management.

Most importantly, Nicole was cared for on equipment which best matched her needs, given that she wished to remain in bed. Her choices were respected, and her dignity maintained.

References

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



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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