

## Comfortable and Peaceful: The Dolphin Therapy Support Surface and Eleganza 5 Bed Significantly Reduced Pain for a Patient Receiving End-of-Life Care

- ↑ Comfort improved
- ↓ Pain reduced
- ↑ Skin intact

### Introduction

Barbara\* (age 79) was admitted to hospital from home with urosepsis. She was unable to walk at home, and was usually hoisted between her bed and chair. However, she had been bedbound prior to admission due to severe pain around her rib cage, which became worse whenever she was moved.

X-rays on admission revealed several fractured ribs, which were thought to have been caused by the hoisting.

Her past medical history included:

- Osteoporosis
- Bilateral total hip replacements following two separate falls and fractures
- Fractured right humerus
- Fractured left wrist
- Chronic kidney disease
- Type 2 diabetes

On admission, Barbara had red and blanching areas to her sacrum, buttocks, and heels.



\*Barbara is not the patient's real name

### Clinical Challenges

Although Barbara's skin was intact, she was clinically extremely unwell and at very high risk of pressure ulcer development. This was exacerbated because repositioning her was very difficult. She started screaming when anyone approached her, and whenever she was repositioned, due to the pain in her rib cage. The staff were anxious about causing more bone fractures and other trauma.

A support surface was needed to prevent skin breakdown, bearing in mind that repositioning was very difficult.

Barbara was treated actively for urosepsis, but responded poorly. She was identified as being at end-of-life, and palliative treatment was commenced.

## Patient Objectives

- Reduce pain
- Improve comfort
- Prevent skin breakdown
- Reduce turning/repositioning frequency

## Introduction of the Dolphin Therapy Fluid Immersion Simulation Support Surface and Eleganza 5 Bed

Dolphin Therapy is a unique reactive support surface that simulates a fluid environment. Research has demonstrated that it maintains tissue symmetry,<sup>1</sup> minimises vascular occlusion,<sup>2</sup> and prevents tissue ischaemia even when the patient is nursed directly on a wound.<sup>3</sup> Data collected from over 3,000 patients has demonstrated that it is extremely effective at prevention of skin damage. It has also improved comfort and pain management in over 99% of patients who had these as an objective.<sup>4</sup>

The Ward Manager was familiar with the Dolphin Therapy surface and knew it would offer the best solution in these circumstances. It was promptly ordered and delivered, and Barbara was transferred onto it on the same day she was admitted to the ward.

The following morning, Barbara seemed visibly more settled and in less pain. However, she was still screaming when being repositioned. The staff were reluctant to reduce her turning frequency, as she was so vulnerable to skin breakdown.

Medstrom's Clinical Advisor visited the ward later that day to see how Dolphin Therapy was working for Barbara. When he heard about the problems with repositioning, he suggested the Eleganza 5 bed could help.

Eleganza 5 is a specialist bed, often used in intensive care. However, for patients such as Barbara, on a general ward, it can be extremely beneficial.

The bed has full platform electrically operated lateral tilt, up to 15° to both the left and right. It helps to reduce the amount of physical handling, and provides a more ergonomic position for caregivers to work at, as they are not stretching and bending over the patient.

It can be moved to lower angles of tilt (approximately 5° to 7°) by one caregiver, which helps to off-load and redistribute pressure. This helps to reduce the amount of physical repositioning required, as well as the number of staff needed. For personal care, with two caregivers, the bed can be tilted to 15°.

The Ward Manager agreed to try an Eleganza 5 bed in conjunction with the Dolphin Therapy surface for Barbara. She was nursed on both products for two weeks, until she passed away peacefully.



Skin intact



Peaceful



Pain reduced

## Summary

The combination of the Eleganza 5 bed and Dolphin Therapy surface dramatically improved Barbara's quality of life in the two weeks she was nursed on them.

Because the bed was effectively doing most of the repositioning, and the surface prevented skin breakdown, care was more hands-off. This, in combination with the comfort that the immersive properties of Dolphin Therapy provides, greatly reduced her pain. She was no longer screaming, much more comfortable, and did not develop any more fractures.

The ward staff found caring for Barbara much easier with this bed and mattress combination. The number of staff needed to provide personal care and reposition her halved after the bed was introduced, from four to two, and two to one respectively.

The amount of time needed was also reduced, freeing staff up for other tasks to help Barbara and the other patients. In addition, the staff felt very relieved knowing how much more settled and comfortable Barbara now was.

Barbara passed away comfortable and pain-free. All objectives for her had been met; she was comfortable, no longer in pain, her skin remained intact, and hands-on repositioning was significantly reduced.

The Ward Manager commented to Medstrom's Clinical Advisor:

"I knew very quickly that **Dolphin Therapy** was the **best surface for Barbara**, but I'd not thought of **using it with a lateral tilting bed**.

"When you see beds like that, your first thought is ITU only. But it was **ideal for Barbara's care**. We were very well supported by Medstrom, but were pleasantly surprised at how easy the tilt and other bed functions we needed were to use. I would **definitely use this combination again** for the right patient."

## References

1. CT scans from St Joseph's Hospital, Tampa, Florida.
2. Worsley PR et al (2015). The effects of a fluid immersion mattresses; an evaluation of fluid immersion therapy for the prevention of pressure ulcers. 18th Annual Meeting of the European Pressure Ulcer Advisory Panel, 17th September 2015. Faculty of Health Sciences, University of Southampton.
3. Mayes KL et al (2012). Cost effective care without clinical compromise: Incorporating the Dolphin Fluid Immersion Simulation Mattress System into the postoperative care of patients undergoing myocutaneous flaps. Poster presented at Wild on Wounds National Conference, September 12 - 15, 2012, Las Vegas, NV.
4. Medstrom (2023). The effectiveness of Dolphin Therapy fluid immersion simulation support surface. Outcomes for over 3,000 highly complex patients. Available online: <https://www.medstrom.com/wp-content/uploads/2023/03/SM1153-Dolphin-Therapy-3000-Patient-Outcomes-Report-Rev1-Mar-2023-1.pdf>



To discover more about **Dolphin Therapy**, **Eleganza 5**, and how **Medstrom** can support you, contact our Clinical Advisors 24/7/365 on:

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