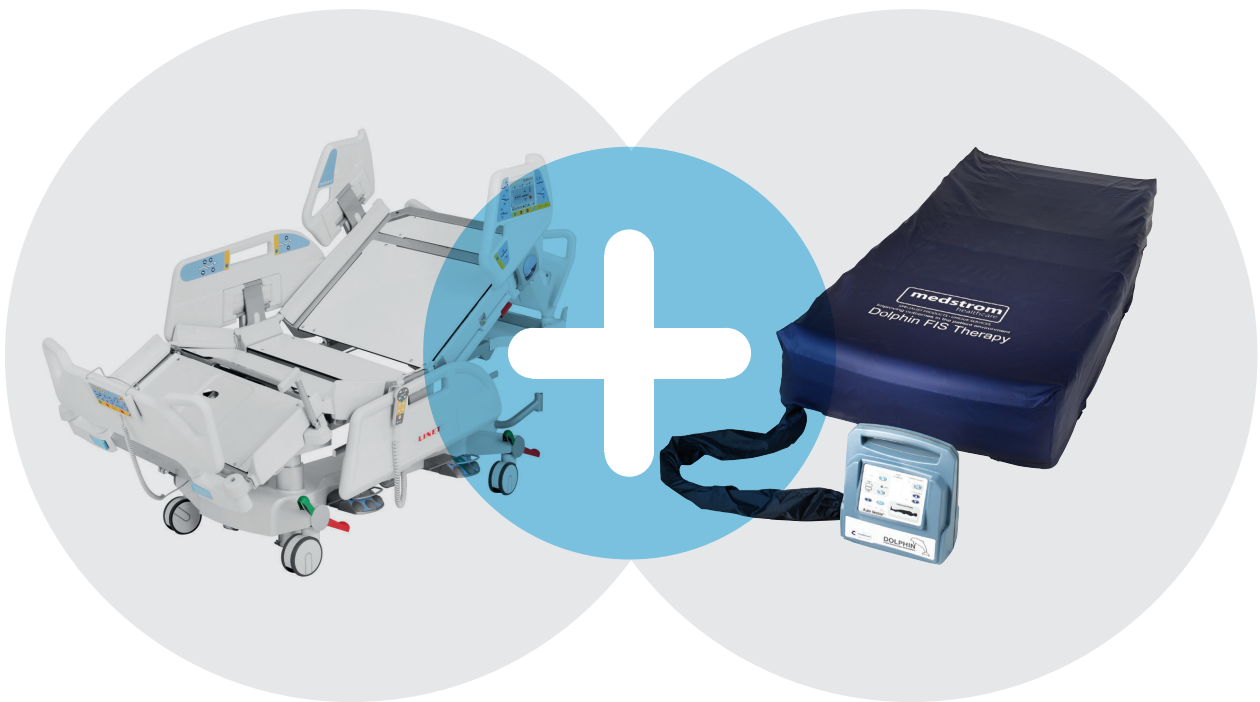


Multicare ITU Bed & Dolphin Therapy

The most effective
clinical combination for
the ITU environment



medstrom⁺

Improved Patient Outcomes

Introducing the most effective clinical combination for the ITU environment

Multicare ITU Bed & Dolphin Therapy

Immobility is a common pathway by which a host of diseases and problems can produce further disability. Patients in ITU who are chronically ill are particularly susceptible to the adverse effects of prolonged immobility.

It is well documented that early mobilisation will improve patients' outcomes. Complications of immobility are known to significantly increase a patient's length of stay in hospital with large associated costs to healthcare commissioners. Patients who are immobile can quickly develop complications, impacting negatively on both length of stay in hospital and overall patient outcome. The combination of the Multicare bed and the Dolphin Therapy surface offers patients in the ITU environment the highest possible levels of protection from the effects of immobility, whilst giving the ability for nursing staff to deliver 'hands-off' care.



The Multicare ITU bed

The Multicare has features that help support early mobility and can be used to treat or prevent pulmonary or other complications associated with immobility. It offers a number of additional features to promote patient safety and to enable simplified care, including built in X-ray and weighing facilities, auto-braking and a bed exit alarm.

The Dolphin Therapy surface

It is well accepted that the types of conditions and comorbidities that bring a patient to intensive care and the treatments available such as inotropes, cause disturbances in circulation, therefore putting the patient at high risk of tissue hypoxia and subsequent skin breakdown.

Maintaining skin integrity may not be the main priority in ITU, however, the consequences of pressure ulcer development may lead to increased length of stay and significant incremental cost of treatment.¹

Dolphin Therapy is being used extensively for the prevention of pressure ulcers in many ITUs across the UK, with outstanding clinical outcomes thanks to its unique ability to support compromised microcirculation.

KEY FACT:

Unlike cushion-based rotational systems that concentrate mobility solely on the patient's chest, Multicare mobilises the whole body laterally. This helps to minimise all complications of immobility.

Multicare Key Features & Benefits:

Automatic Lateral Therapy

The Dept. of Health reports that VAP prevention is one of the most cost-effective interventions that can be achieved in ITU. VAP increases length of stay and has high incremental treatment costs of £6,000-£22,000.²

KEY FACT:

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During bed rest or periods of immobility, there can be adverse effects on the respiratory system. These include dependent oedema with the supine patient and an impaired ability to clear the lungs. This impaired clearing places the patient at greater risk for VAP or hospital acquired pneumonia.

Automatic Lateral Therapy allows secretions in the chest to be mobilised, reducing this risk and helping staff provide postural drainage where secretions are causing inefficiencies in ventilation.

Unlike cushion-based rotational systems that concentrate mobility solely on the patient's chest, Multicare mobilises the whole body laterally. This helps to minimise all complications of immobility by:

- maintaining mobility of chest secretions
- maintaining mobility of the gut
- preventing stasis of urine
- continually stimulating muscular and skeletal systems
- maintaining mobility of blood flow including pulmonary blood flow to maximise oxygenation

Platform Based Lateral Tilt

As the population becomes older, frequently with multiple co-morbidities, the ITU patient may become more challenging to care for.

Lateral tilt provides the ability to provide care whilst protecting from manual handling injury during essential interventions such as hygiene, bed making, skin checks, dressing changes and to assist repositioning.

The lateral tilt may also be used by physiotherapists for postural drainage or to assist them to reach the patient during physiotherapy interventions.



Lateral X-ray Cassette Holder

The lateral X-ray cassette holder enables safe imaging of the chest without needing to reposition the patient on the bed.



Improved Mobilisation

The ITU patient is at risk of many complications caused by immobility: muscle atrophy, contractures UTIs, constipation and postural hypotension to name a few. Many of these risks can be reduced by placing the patient in more upright positions and once the patient is able, assisting them to exit the bed safely.

Cardiac to Full Chair Position

- The full chair position helps to maximise respiratory function and enhances patient comfort
- The patient's feet are fully supported, reducing the risk of foot drop
- Psychologically this position will assist the patient to feel they are progressing and assist in socialisation

Mobi-Lift

- This unique device helps assist patients out of bed safely with reduced staff effort
- Combines support handle with egress height adjustment
- Supports the active participation of the patient





Advanced Weighing System

- Advanced Weighing System integrated into the Multicare bed is very simple to use and is capable of indicating the exact weight of the patient in most bed positions
- Yields not only the current value of the patient's weight, but also provides valuable information about changes over time

Advanced Safety Features

i-Brake

- Automatic braking prevents uncontrolled movement and falls caused by leaning on an unbraked bed.

Multi-zone bed exit alarm

- The bed exit alarm alerts staff if patients are attempting to exit the bed without supervision

Multi-protect side rails

- Progressive side rails incorporate sensors to detect when they are in the down position, ensuring patient safety at all times



Dolphin Therapy: The most effective prevention for pressure damage in ITU scenarios

Dolphin Therapy is a reactive mattress system that creates a simulated fluid environment, enabling full immersion and envelopment, significantly reducing pressure, shear and tissue deformation. As a result of this:

- Vascular occlusion is minimised, maintaining near normal blood flow
- Tissue symmetry is maintained
- Tissue ischemia is prevented, even when the patient is nursed directly on the affected area
- Positive patient outcomes are achieved

The maintenance of tissue perfusion is the key reason we see such outstanding outcomes, even in the most compromised of patients.

Clinical outcomes for patients in Intensive Care

Over the last two years, we have recorded clinical outcomes for 82 of the most complex patients in intensive/critical care from 18 institutions. These included patients who had been in surgery for over 16 hours or who had come out of surgery with open chests and could not be repositioned. The majority of patients were ventilated, sedated, immobile and were nursed with inotropes. However, other conditions included post-surgery, paraplegia, cerebral palsy, pneumonia, burns, sepsis, spinal drainage, aortic repair, carcinoma, organ failure and brain injury.

Outcomes included:

- Dolphin enabled time between repositioning to be extended for 61% of patients who had previously been nursed on a dynamic mattress
- Dolphin was 100% effective at preventing pressure damage in patients with intact skin
 - 53 patients with intact skin were placed on Dolphin. Outcome data for these patients indicates that none developed pressure damage, despite their critical condition
- 90% of patients with existing pressure damage healed, improved or remained static
 - 29 patients had existing pressure damage with a total of 127 pressure ulcers/moisture lesions
 - 26 patients' (90%) pressure damage healed, improved or remained static
 - 3 patients' (10%) pressure damage deteriorated. However, two patients passed away and one refused all pressure area care

In addition:

- Dolphin reduced pain in 100% of patients for whom this was an objective
- Dolphin improved comfort for 95% of patients for whom this was an objective
- Dolphin improved concordance with repositioning for 67% of patients for whom this was an objective



KEY FACT:
Dolphin is 100%
effective at
preventing pressure
damage in patients
with intact skin





Medstrom's specialist ITU package is available to rent, offering:

- Fast response and delivery
- 24/7/365 call centre
- 24-hour clinical support from our team of Clinical Nurse Advisors
- Every product is delivered thoroughly decontaminated and is function and safety tested
- Installation and ward staff product training is supplied by Medstrom technicians who are City & Guilds qualified and DBS checked
- On-going training is supplied by our Clinical Nurse Advisors post-patient placement and throughout the product's use to ensure desired clinical outcomes are being achieved
- We offer a range of flexible financing options from daily rental to long term fixed period rental

If you would like to discuss how our new ITU package could benefit your patients, please call us and ask to speak to one of our RN/RGN-qualified Clinical Advisors.

If you'd like to experience Multicare + Dolphin Therapy, please call us to request an immediate trial, with the first five days offered free of charge.

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- ¹ Average incremental cost of one pressure ulcer in ITU is £21,901 (NICE Costing Statement, 2014)
- ² BJMP Ventilator Associated Pneumonia an Overview. 2009:2(2) 16-19