TotalCare SpO$_2$RT
Pulmonary Therapy System

A unique therapy system for the acutely ill, immobile patient which revolutionises the caregiver environment.
At a glance:

- Integrated pulmonary therapies help to improve patient outcomes.
- Ergonomically designed for caregiver efficiency and safety.
- Provides effective pressure ulcer prevention.

TotalCare SpO₂RT® Therapy System offers a combination of frame and surface that makes treating the most dependent patients easier and improves safety.

At the heart of the system is the integrated Therapy-on-Demand® concept, which allows caregivers to easily commence treatment modalities such as continuous lateral rotation therapy, percussion and vibration therapies as required or to treat the patient in the prone position. As the patient's acuity improves caregivers can commence rehabilitation programmes utilising FullChair™ position to aid respiratory mechanics and ease the weaning process. At later stages, to enhance mobility and rehabilitation further, the Chair Egress™ position can be utilised to encourage weight bearing.

TotalCare SpO₂RT® Therapy System is suitable for patients with or at risk of pulmonary complications due to immobility and those at moderate to high risk of tissue damage.

This winning combination of therapeutic body positioning and pressure relief makes a real difference to both patients and caregivers. By reducing the need for patient moving and handling, TotalCare SpO₂RT® Therapy System increases caregiver efficiency and improves patient outcomes.
The Impact of Nosocomial Infections in Critical Care

The complications of immobility such as nosocomial pneumonia are amongst the most commonly acquired infections in critical care, with statistics showing affected patients have higher morbidity and mortality rates. However, the effects reach far beyond the patient, increasing caregiver workload with higher dependency rates, and exacerbating the financial burden on the hospital as the costs of caring for the patient rise with length of stay in both the critical care department and the hospital increasing.

Breakdown of Nosocomial Pulmonary Infections in Critical Care

- **Intensive Care Patients**: 45% of infections
- **Nosocomial Infections**: 50% of infections
- **Ventilator Acquired Pneumonia**: 25% of nosocomial infections

Increased length of stay, costs and resource consumption

Most common infection in the critically ill

The **ideal support system**, for managing your acutely ill, immobile patients.
Continuous Lateral Rotation Therapy

Continuous Lateral Rotation Therapy as delivered by TotalCare SpO₂RT® Therapy System utilises Hill-Rom’s patented rotation system using sequential deflation of the air sacs to provide passive but effective body movement, resulting in continuous changes to areas of lung dependency and mobilisation of pulmonary secretions and blood flow.

The impact of this non-invasive therapy is now recognised as being effective in reducing the incidence and severity of nosocomial pneumonia and lower respiratory tract infections, and in aiding in the management of patients with oxygenation based disorders.\(^4\,^5\)

Continuous Lateral Rotation Therapy has been demonstrated to be effective in helping to reduce the number of ventilator days and length of stay in both the critical care department and the hospital.\(^6\,^7\,^8\)

Prone Positioning

The prone position is becoming commonly used to manage patients with acute lung injury and adult respiratory distress syndrome,\(^9\) reports suggest using the prone position can improve oxygenation.\(^10\,^11\) TotalCare SpO₂RT® Therapy System allows patients to be nursed in the prone position.

Percussion and Vibration Therapies

A “hands off” option to aid in the mobilisation of retained secretions when “hands on” chest physiotherapy is contraindicated. Proven effective and well tolerated,\(^12\) it has been suggested that when combined with continuous lateral rotation therapy secretion clearance in patients with large secretion volumes is increased.\(^12\)

Turn Assist™ feature

Hill-Rom’s Turn Assist™ feature safely and gently turns the patient onto his/her side for care procedures thus reducing the number of caregivers required and the resultant risk of injury.

Advanced zoned pressure relief

TotalCare SpO₂RT® Therapy System has a two-layer surface that provides optimal zoned pressure relief even during continuous lateral rotation therapy.

Optirest®

This therapy mode offers a wave like motion to enhance comfort and provide a calming relaxing sensation for patients at risk of sensory overload.
The TotalCare SpO₂RT Therapy System is designed for the caregiver, head to foot.

**FullChair™ Position**
As the patient’s acuity improves caregivers can gradually increase the head of bed elevation until chair positioning can be utilised. Using the unique one-button chair positioning, a single caregiver can place the patient in the FullChair™ position, ideal for:

- enhancing respiratory mechanics to aid in weaning from ventilation or to prevent ventilation being required
- improving psychological status, the upright position enhances orientation and awareness thereby effectively accelerating patient recovery.

**Chair Egress™ Position**
At later stages to enhance mobility and progress rehabilitation further the Chair Egress™ position can be used, simply by removing the footboard, the caregiver can aid the patient to weight bear or egress the bed reducing the risk of injury.
**Point-of-Care® side rail controls**

All controls, information and alarm systems are conveniently placed around the Point-of-Care® controls by the patient’s side. The therapy controls, optional Patient Weigh Scale and bed exit alarm can also be consulted from the Point-of-Care® side rail controls via the Graphical Caregiver Interface feature (GCI®) - a simple to use interactive control system.

The OneStep™ design side rails can be released using a single hand, tucking away to allow unrestricted access to the patient and a zero transfer gap.

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**IntelliDrive™ System**

This optional facility offers power-assisted transport and enhanced bed manoeuvrability reducing the risks of injury to members of the multi-disciplinary team during transport.

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**FlexAfoot® Retractable Foot Mechanism**

The foot section of bed and surface can be retracted and extended in both chair and supine positions, this allows for the patient’s feet to be correctly positioned in the supine position to help prevent footdrop or to provide the support in the FullChair™ position.

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**HandsFree™ features**

HandsFree™ emergency CPR and Trendelenburg release mechanism for instant care, even from the FullChair™ position.

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**Shearless Pivot™**

This unique mechanism combines the articulation of the frame and the surface minimising shear forces, reducing migration of the patient towards the foot of the bed. Repositioning is minimised reducing moving and handling risks while patient comfort is maximised.
## Technical Data

### Overall length
- **FlexAfoot® fully retracted**: 81.5" (207.0 cm)
- **FlexAfoot® fully extended**: 93.5" (237.5 cm)

### Overall width
- Side rails stowed: 36.5" (92.7 cm)
- Side rails up: 40" (102 cm)

### Bed height without mattress
- Height from floor to top of deck:
  - Minimum: 17.5" (44.5 cm)
  - Maximum: 36.5" (92.7 cm)

### Maximum side rail height (without mattress)
- 14.75" (37.5 cm)

### Side rail opening size
- Upper/lower side rails: < 2.4" (<60.9 mm)

### Minimum under-bed clearance
- 4.25" (108.0 mm) for 5" diameter casters
- 4.75" (121.0 mm) for 6" diameter casters

### Caster diameter
- 5" (12.7 cm) standard
- 6" (15.2 cm) optional

### Overall bed weight
- With minimum options/accessories: 525 lbs (238 kg)
- With maximum options/accessories: 585 lbs (265 kg)

### Trendelenburg/Reverse Trendelenburg
- 15°/15°

### Head elevation
- 75°

### Bed lift capacity
- 500 lbs (227 kg)

### Mattress width
- 35" (89.9 cm)

### Mattress length
- 84" (213.5 cm)

### Mattress weight
- 37.5 lbs (17 kg)

### Sound level (measured 1 metre from patient’s ear)
- With Percussion and Vibration Therapy inactive: < 65 dB(A)
- With Percussion and Vibration Therapy active: < 69 dB(A)

### Rated voltage
- 100V, 110V, 120V, 127V, 220-240V AC

### Power/input
- 9.9 A/5.0 A

### Frequency
- 50/60 Hz

### Scale
- Compliant with EN45501 class III

### Accuracy:
- Maximum permissible error ± 0.25 kg
- Maximum permissible error ± 0.5 kg
- Maximum permissible error ± 0.75 kg

### Weighing Capacity:
- 200 kg

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### References:

3. CDC Guidelines for Prevention of Nosocomial Pneumonia 1997 MMWR 46(RR-1) 1-79
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