

The new generation hybrid support surface

Mercury Advance  
**SMART**care<sup>®</sup>

A Step Change in Care Delivery

**Intelligent<sup>®</sup>**  
Pressure Care  
Management



THE QUEEN'S AWARDS  
FOR ENTERPRISE:  
INNOVATION  
2016

# Mercury Advance SMARTcare®

## A Step Change in Care Delivery

Mercury Advance SMARTcare® transforms the Pressure Ulcer Prevention care delivery model, supporting improved clinical outcomes and operational productivity.

- ✓ 56% REDUCTION IN PRESSURE ULCER INCIDENCE<sup>1</sup>
- ✓ PATIENTS ON APPROPRIATE SUPPORT SURFACE UP TO 7 HOURS FASTER<sup>2</sup>
- ✓ UP TO 6,500 HOURS OF NURSING TIME RELEASED 'BACK TO CARE'<sup>2</sup>
- ✓ UP TO 55% COST SAVINGS ON TRADITIONAL DYNAMIC MATTRESS APPROACH<sup>2</sup>

Designed to support and empower clinical choice, Intelligent Pressure Care Management is clinically proven to reduce pressure ulcer incidence whilst delivering improved operational efficiencies.

Intelligent Pressure Care Management ensures best use of clinical resources to deliver more responsive patient care, measurably improved patient outcomes and significant cost savings.

Utilising the award-winning Mercury Advance SMARTcare® patient support system, Intelligent Pressure Care Management is an innovative solution in the prevention and treatment of pressure ulcers.

### A New Generation Hybrid Support Surface

Mercury Advance SMARTcare® now offers more effective dual therapy delivery in a single surface, by combining advanced, clinically proven technologies previously only available in separate hybrid surfaces. Advanced air displacement technology, incorporated in a unique 4 zone configuration, now provides more effective pressure redistribution when the surface is used in non-powered mode. When used in powered mode, the unique 'foam in air cell' design delivers effective pressure relief.

When used in conjunction with a SMARTresponse® power unit, Mercury Advance SMARTcare® can be programmed to either automatically or remotely 'step up' patient care in response to clinical judgement and real time patient movement information.

### How it Works

Hybrid support surfaces are clinically proven to support the prevention and treatment of pressure ulcers. Representing a step change in care delivery, achieved by reducing the number of steps and time involved in getting patients onto the right support surface, hybrid solutions are also a more cost effective solution, promoting best use of resources when compared to the traditional use of standard high specification foam and alternating pressure air mattresses.

This single, cost-effective solution can easily be stepped up from Static to Dynamic mode, and down again when deemed clinically appropriate, with no delays, associated administration or moving and handling requirements for patient transfer.

When used in non-powered mode, clinically proven advanced air displacement technology continually optimises pressure redistribution in response to patient body weight and movement. The unique 'air only' heel zone effectively offloads pressure on the vulnerable heel area. When used in powered mode Mercury Advance SMARTcare® delivers pressure relief via a series of connected alternating foam and air cells. Unencumbered by a top layer of foam on the mattress, the unique 'foam in air cell' construction ensures the delivery of effective pressure relieving therapy. Dependant on clinical judgement, the alternating function can be operated on either a LO or HI Pressure.

With the addition of a SMARTresponse® power unit, Mercury Advance SMARTcare® can be programmed to either step up patient care automatically or remotely when a period of no patient movement has been detected. Supporting clinical choice and the earliest intervention, SMARTresponse® can pro-actively communicate 'real time' patient information directly to the clinician, via either a mobile device message or a desktop ward view.

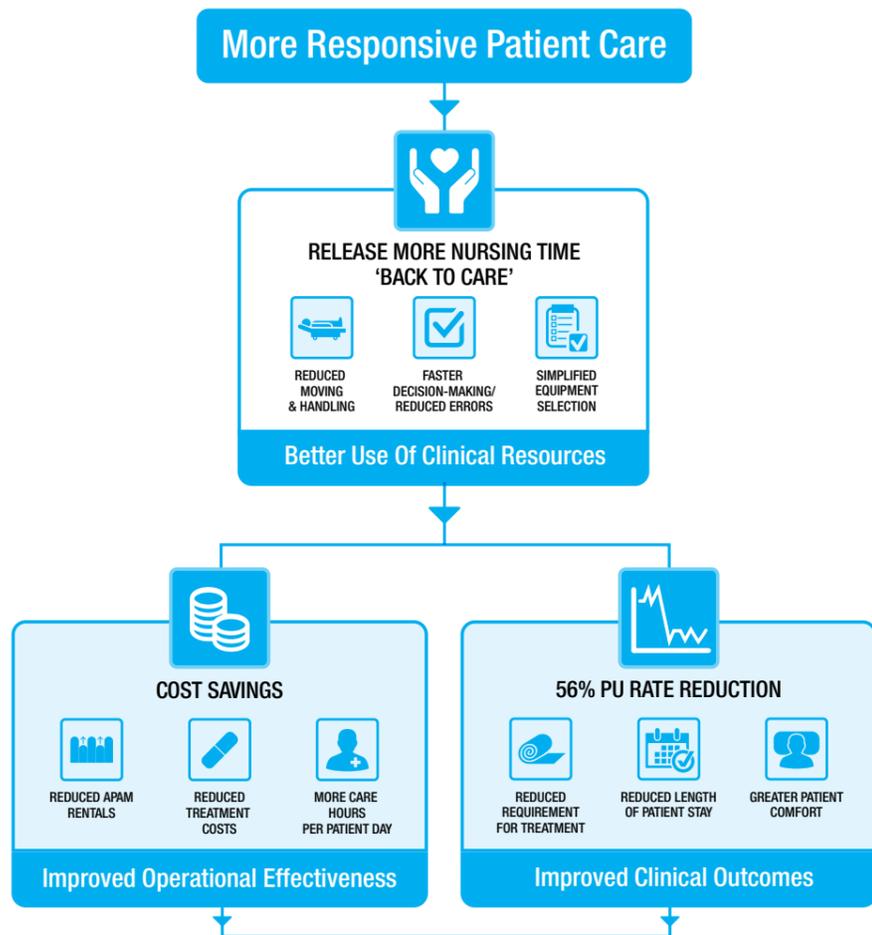
Mercury Advance SMARTcare® combines the most innovative and clinically proven pressure care technologies in a single support surface.



MORE EFFECTIVE, CONTINUALLY OPTIMISED PRESSURE REDISTRIBUTION	EFFECTIVE PRESSURE RELIEF THERAPY	PROGRAMMABLE FEATURES SUPPORT THE EARLIEST INTERVENTION WHERE THE MOST RESPONSIVE CARE IS REQUIRED
<ul style="list-style-type: none"> <li>• High specification CME foam and air cell construction</li> <li>• Advanced air displacement technology continually optimises pressure redistribution in response to patient weight and movement</li> <li>• 'Air only' heel zone effectively offloads pressure on this vulnerable area</li> </ul>	<ul style="list-style-type: none"> <li>• Simply add power unit for alternating function</li> <li>• Unique 'foam in air cell' construction for more effective therapy delivery</li> <li>• 10 minute, 2 in 1 alternating cycle</li> <li>• Choice of LO or HI Setting</li> </ul>	<ul style="list-style-type: none"> <li>• Identical mattress and therapy delivery as 1 &amp; 2</li> <li>• Step Up care automatically after a period of patient non-movement</li> <li>• Step Up care remotely when notified of a period of patient non-movement</li> </ul>

**Real-world evidence from a large-scale multisite evaluation of a hybrid mattress<sup>1</sup>**

A large scale, multi-site review of hybrid implementation concludes that the powered hybrid support surface alters the process of pressure ulcer prevention care delivery, in turn delivering improved patient outcomes alongside improved operational effectiveness.



Summary of improvements achieved

**“...where people are empowered to embrace available innovations it is very possible to deliver improved patient outcomes alongside improved operational effectiveness.<sup>1</sup>”**

With healthcare agendas focused on achieving improved clinical outcomes and operational efficiencies, Intelligent Pressure Care Management delivers both by transforming the Pressure Ulcer Prevention care delivery model.

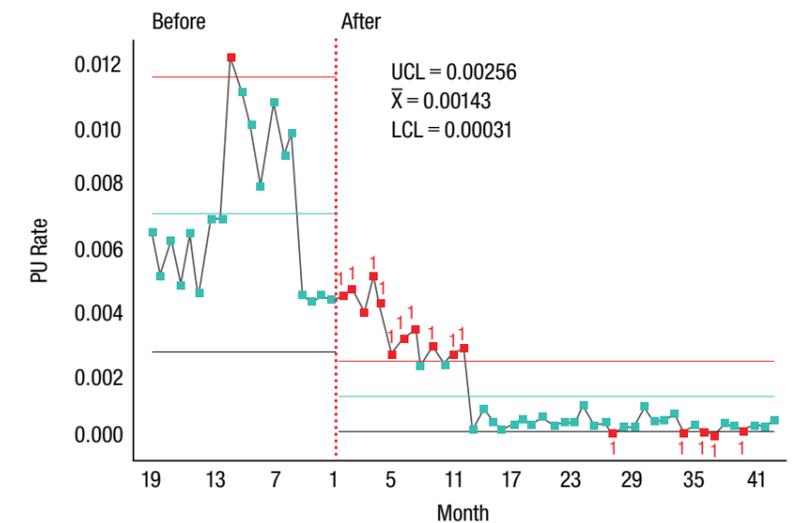
The Intelligent solution is not only clinically proven but designed to make a measurable difference to Pressure Ulcer Prevention and other key healthcare metrics related to efficiency savings, better use of clinical resources and average length of patient stay.

Independent expert evaluations and real world evidence demonstrate the positive impact of Intelligent Pressure Care Management.

**56% Reduction in Pressure Ulcer Incidence**

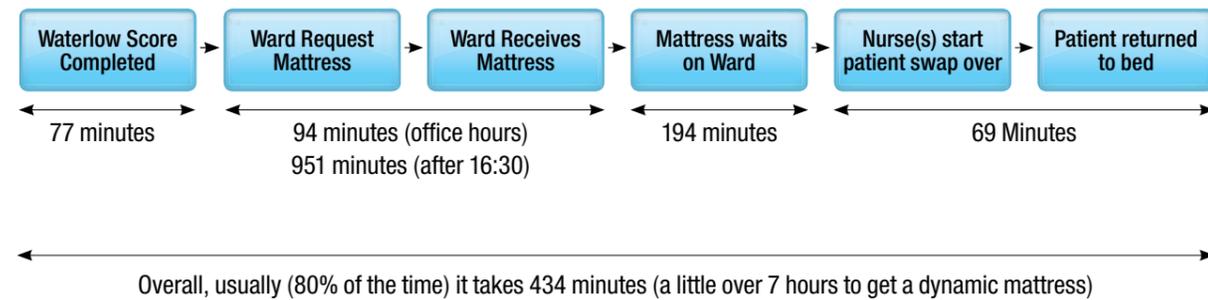
A large scale, long term evaluation examining the implementation of Intelligent Pressure Care Management concluded that the solution represents a significant step change in care delivery, with results demonstrating a 56% reduction in PU occurrence alongside significant improved operational efficiencies.

A retrospective analysis of PU data both pre- and post- hybrid implementation also showed that the reduction was sustained.

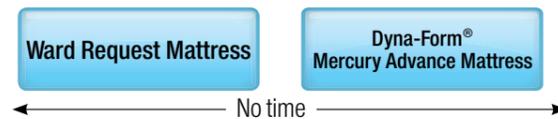


## Patients on appropriate support surface up to 7 hours faster

Prior to the implementation of Intelligent Pressure Care Management the study showed that it could take up to over 7 hours to transfer patients onto a Dynamic mattress following a clinical requirement being identified.



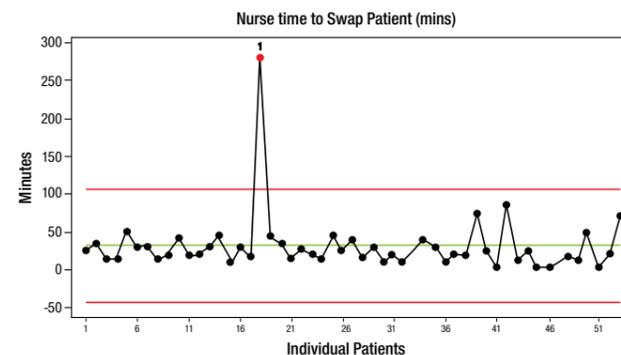
With susceptible patients at risk of developing a full-thickness pressure ulcer in just one or two hours<sup>3</sup> the reduction of this delay could potentially prevent a proportion of hospital acquired pressure ulcers. By eliminating the requirement for patient transfer, and the various delays associated with requesting a different support surface, Intelligent Pressure Care Management reduced the measure of over 7 hours to zero.



## Up to 6,500 hours of Nursing Time released 'back to care'

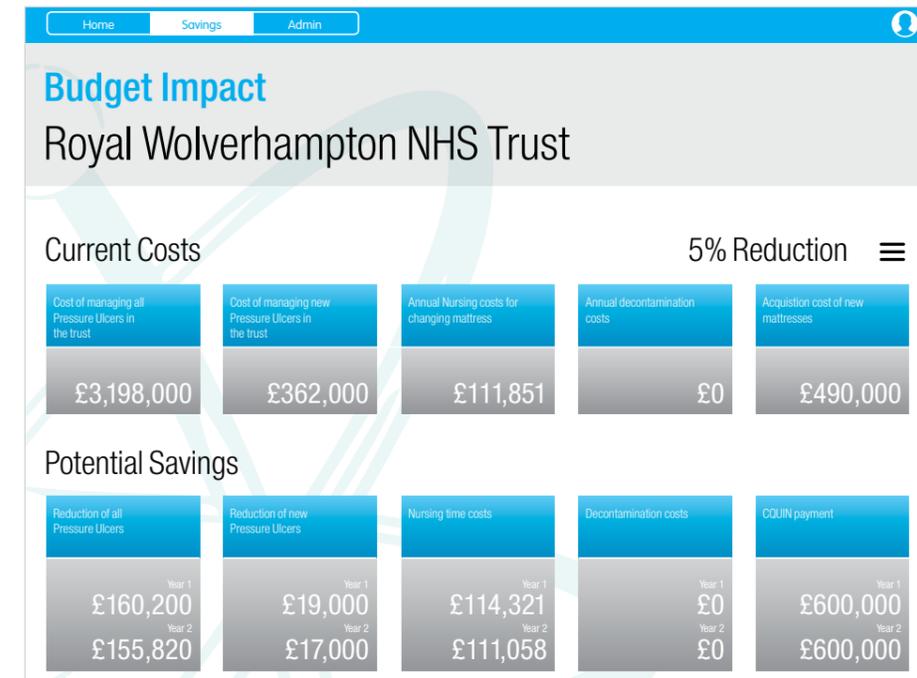
The time savings achieved by reducing the processes, and removing the requirements for moving and handling assistance and administration were calculated to be considerable.

Following implementation of Intelligent Pressure Care Management the extrapolated results over a 12 month period demonstrated the potential to release up to 6,500 hours of nursing time 'back to care'.



80% (most) of the time it takes 69 minutes to swap a patient to the new mattress

## Up to 55% cost savings on traditional Dynamic mattress approach



Direct Healthcare Services Representatives offer free of charge Intelligent Business Case consultations using the latest health economic modelling tool and SPC analysis. Please contact our Sales Offices for more information.

The new generation hybrid support surface

# Mercury Advance SMARTcare®

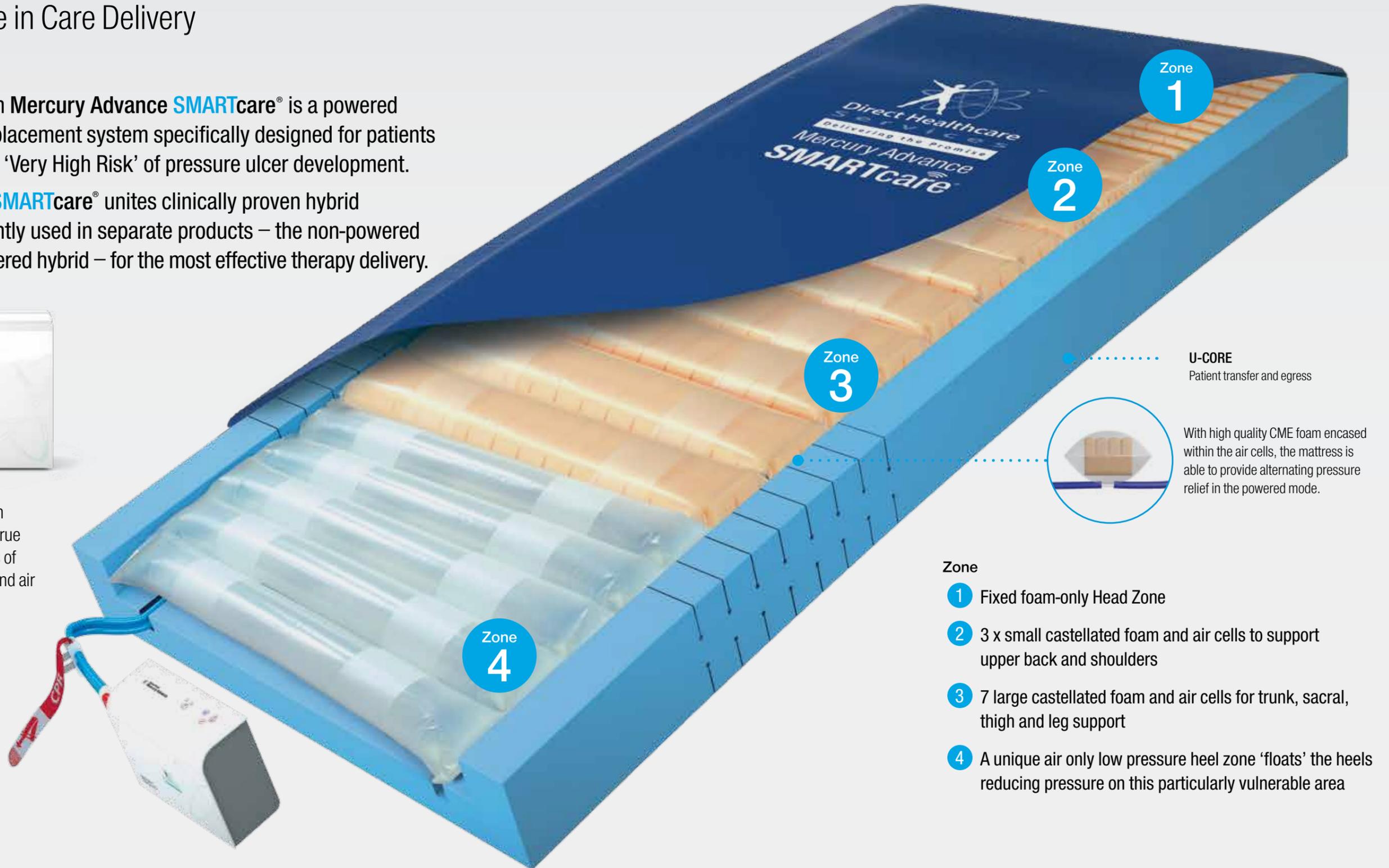
A Step Change in Care Delivery

The new generation Mercury Advance SMARTcare® is a powered hybrid mattress replacement system specifically designed for patients considered to be at 'Very High Risk' of pressure ulcer development.

Mercury Advance SMARTcare® unites clinically proven hybrid technologies currently used in separate products – the non-powered hybrid and the powered hybrid – for the most effective therapy delivery.



The system can be used in powered mode to deliver true pressure relief via a series of specially designed foam and air cells that alternate on a 10 minute cycle.



Specialist 'Zoned Support' Foam & Air Cell Configuration

The most advanced air displacement technology responds to patient body weight and movement for more effective pressure redistribution in static mode.

Zone 1

Zone 2

Zone 3

Zone 4

**U-CORE**  
Patient transfer and egress

With high quality CME foam encased within the air cells, the mattress is able to provide alternating pressure relief in the powered mode.

**Zone**

- 1 Fixed foam-only Head Zone
- 2 3 x small castellated foam and air cells to support upper back and shoulders
- 3 7 large castellated foam and air cells for trunk, sacral, thigh and leg support
- 4 A unique air only low pressure heel zone 'floats' the heels reducing pressure on this particularly vulnerable area

The new generation hybrid support surface

# Mercury Advance SMARTcare<sup>®</sup> with SMARTresponse<sup>®</sup>

Available in 2018

For the most responsive care delivery, or logistically demanding scenarios, upgrade the power unit to SMARTresponse<sup>®</sup> for the earliest intervention.

Suitable for both community and acute care settings, SMARTresponse<sup>®</sup> utilises the latest communication and patient movement technologies, enabling the 'stepping up' of patient care either automatically or remotely when a period of patient inactivity has been detected.

With the focus on clinical choice, SMARTresponse<sup>®</sup> empowers healthcare providers to achieve earlier intervention in pressure ulcer prevention.



Auto Start

Selecting Auto Start allows the system to automatically 'step up' care when no patient movement has been detected for a period of time.



Alert Me

Alert Me sends a message directly to the care provider when no patient movement has been detected for a period of time.



Fall Detector

Fall Detector can be activated through the night to detect bed exit events. In the event someone has fallen out of bed, an alert is sent directly to the care provider.



# Direct Healthcare Group

DIRECTHEALTHCAREGROUP.COM

## Sales Offices

### UK & Europe

Direct Healthcare Services Ltd.  
Withey Court  
Western Industrial Estate  
Caerphilly, United Kingdom  
CF83 1BF

T: +44 (0) 845 459 9831  
info@directhealthcareservices.co.uk

### Asia Pacific

Direct Healthcare Services PTY Ltd.  
PO Box 562  
Wembley  
Western Australia 6913

T: +61 (0) 423 852 810  
info@directhealthcareservices.com.au



Direct Healthcare  
Services

Delivering the Promise



Issue 1 Date: November 2016

DIRECTHEALTHCARESERVICES.CO.UK