

M.A.PTM

monitor. alert. protect



monitor



alert



protect

How effective is your pressure reducing surface?
SEE THE PRESSURE DON'T GUESS THE PRESSURE!

Sidhil introduces M.A.PTM - the very first Continuous Bedside Pressure Monitoring System, which can be used on any mattress system to provide 24/7 data on pressure levels developing between patient and support surface.

See the Pressure you're up against...

- Presented graphically on a screen, this real time information on pressure distribution gives nursing staff and carers the accurate detail they need to reposition patients effectively, helping to reduce the incidence of pressure ulcers.
- Figures from 2013 suggest that the prevalence rate of pressure ulcers in healthcare environments was 4.7%.⁽¹⁾
- Quite apart from the unnecessary suffering caused, the daily costs of treating a pressure ulcer are estimated to range from £43 to £374. For ulcers without complications the daily cost ranges from £43 to £57.⁽²⁾



...making it better

SEEING IS KNOWING...



M.A.P™ is the first ever, continuous bedside pressure monitoring system giving caregivers and patients pressure distribution data to guide repositioning, off-loading, and support surface utilisation.

THE M.A.P™ PRESSURE SENSING MAT:

- The M.A.P™ pressure sensing mat is manufactured from an intelligent textile developed expressly for continuous patient monitoring.
- The outer layer consists of a medical grade biocompatible material which houses thousands of sensing points capable of accurately imaging the body of the patient lying on the support surface.
- This intelligent textile is flexible, which allows it to work with patients of different weights and sizes, even most bariatric patients. Continuous pressure readings are sent to a monitor attached to the mat, where they display as a clear colour-coded visual image.

THE M.A.P™ MONITOR

- The M.A.P™ monitor continuously displays the data gathered by the pressure sensing mat, showing a real time image.
- The monitor can be positioned to allow nursing staff direct access to the face of the monitor, or it can be placed facing the patient.
- A simple touch screen interface allows implementation of customised settings and audible alerts.



BRINGING PRESSURE MONITORING TO THE BEDSIDE

The monitor displays a real time, high resolution, visual 'pressure map' of the patient's body. Areas of high pressure are clearly delineated in red and orange, with lower pressure areas showing as green and blue. Caregivers use the image as a guide to alter the patient's position to reduce pressure and therefore

reduce the potential for pressure ulcers. Often very small changes in position ('micro-movements') reduce pressures dramatically, which is particularly effective for patients where full body repositioning or even turning may be restricted.

THE VISUAL INDICATION GIVEN BY THE M.A.P™ MONITOR CONFIRMS TO CAREGIVERS THAT:

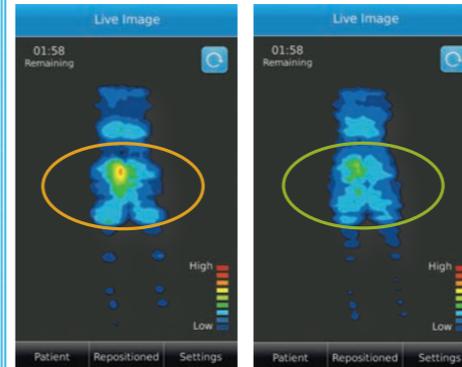
- *Repositioning (even very minimal movements) has relieved pressure.*
- *Pressure has been reduced in vulnerable areas (such as heels).*
- *Elevating the head of the bed has made a difference.*

Ensure Best Repositioning through M.A.P™-guided "micro-movements":

ICU patients can be less stable and unable to be fully turned.

M.A.P™ helps staff make minor adjustments to decrease high pressures beneath these patients.

Before looking at M.A.P™ and making small adjustments "micro-movements":



BEFORE

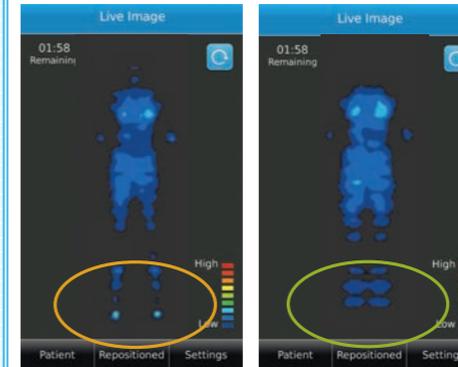
AFTER

Confirm Effectiveness of Off-loading:

Confirm Off-loading without disrupting the patient

Heel not floated

Heel floated effectively

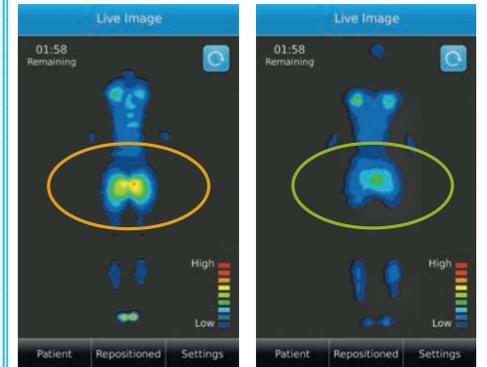


BEFORE

AFTER

Confirm Effectiveness of Repositioning Interventions:

Is the head of the bed too high for your patient?
Head of bed: 45 degrees Head of bed: 30 degrees



BEFORE

AFTER

BRINGING PRESSURE MONITORING TO THE BEDSIDE



YOU CAN EASILY CHECK THAT THE SUPPORT SURFACE IS WORKING CORRECTLY FOR INDIVIDUAL PATIENTS

- The contribution made by support surfaces can be enhanced and monitored over time, adjusting settings to match individual needs and verifying that these adjustments have had the correct effect.

VERIFY SUPPORT SURFACE FUNCTIONALITY AND ADJUSTMENT AT THE BEDSIDE

Is the Support Surface at the Correct Setting?

Bottomed out

The comfort setting on the mattress has been set too low, this has caused the patient to bottom out due to not enough pressure in the cells.

Too firm

Instead of using the static button, which resets to previous setting after 30 mins, the comfort adjustment button was set high to keep the mattress at max inflation - this is too firm for patient.

Is the Support Surface Set ideally for Individual Patients?

Air Mattress Set by Patient Weight or Bed Company Guidelines

Individual patient requirements are not considered by mattress company during set up of a mattress - most times it is left at a default medium comfort setting.

MAP Guided Air Settings

Air mattress readjusted using the M.A.P.TM monitor to find the best pressure redistribution

SEEING, MONITORING, AND MANAGING PRESSURE AIDS IN THE PREVENTION OF PRESSURE ULCERS

Evaluation of a continuous bedside pressure monitoring system to measure the effectiveness of a patient repositioning intervention in the prevention of pressure ulcers in two UK Acute (Hospital) Orthopaedic Trauma wards -

- Michelle Greenwood, Lead Nurse, Tissue Viability, *Walsall Healthcare NHS Trust*
- Mark Collier, Lead Nurse/Consultant-Tissue Viability, *United Lincolnshire Hospitals NHS Trust*.

OBJECTIVES

- To collect quantitative and qualitative data to determine if the M.A.P.TM system would provide practical and clinical benefit if adopted within UK pressure ulcer prevention.

METHODS

- 12 M.A.P.TM systems installed in two Orthopaedic Trauma Department wards.
- Patients selected based on 'high risk' of developing a pressure ulcer or having already developed an ulcer.
- Pressure ulcer data collected.
- Staff surveyed about use of the M.A.P.TM and views of patients/family visitors.

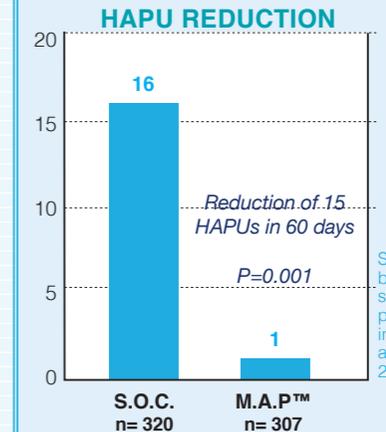
OUTCOME

- No hospital acquired pressure ulcers developed for the high risk patients using the M.A.P.TM system.
- Staff reported that it enhanced their approach to repositioning patients to minimise risk of pressure ulcers occurring.
- Some patients reported improved sleeping patterns as a result.

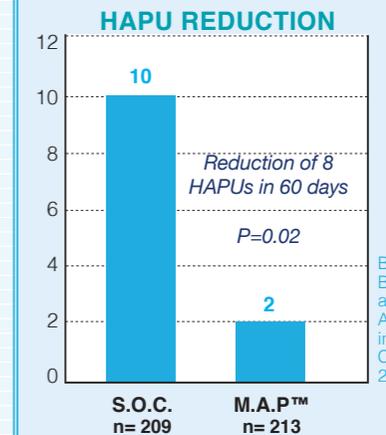
STAFF	YES	NO
The control unit helped me to provide effective repositioning	100	0
The system helped remind me to reposition	100	0
Did the system help with adherence to the repositioning schedule?	100	0
Did the patient develop pressure related tissue damage whilst using the M.A.P.TM system?	0	100
Overall was the M.A.P.TM system beneficial in helping reposition the patient?	100	0

PRESSURE ULCER PREVENTION

M.A.P.TM utilisation results in a statistically significant reduction in **hospital-acquired pressure ulcers (HAPU)**



Siddiqui A, et al. Continuous bedside pressure mapping system for prevention of pressure ulcer development in the ICU: a retrospective analysis. *WOUNDS* 2013; 25: 333-339.

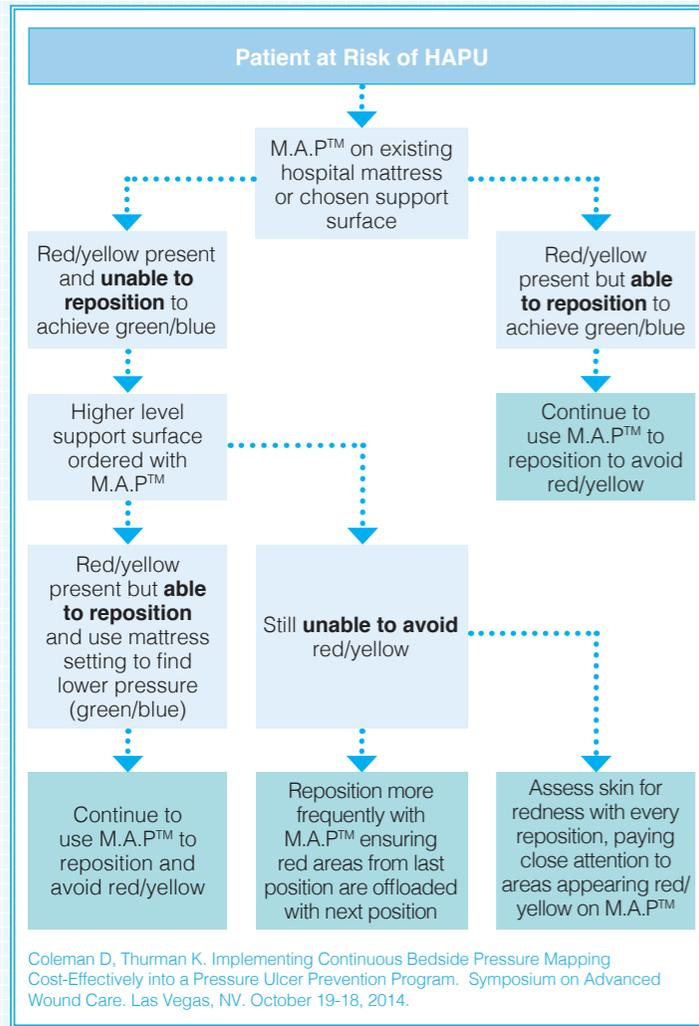


Behrendt R, et al. Continuous Bedside Pressure Mapping and Rates of Hospital-Associated Pressure Ulcers in a Medical Intensive Care Unit. *Am J Crit Care*. 2014;23(2):127-133.

M.A.P™ IMPLEMENTATION PROCESS



Clinical Evidence has documented cost effective reductions in hospital-acquired pressure ulcers through the use of M.A.P™. Below shows how it could work for you:



The implementation of the M.A.P™ system ensures live monitoring and management of pressure distribution for specific patients. In addition the system allows the staff an enhanced awareness of the benefits of patient repositioning which will have a continued benefit for a wider range of patients even if they are not using the M.A.P™ system directly.

To ensure consistent monitoring of the patient the M.A.P™ system allows the caregiver to set a timed Repositioning Schedule tailored to the patient's requirements.

REPOSITIONING SCHEDULE

Monitoring Details
Repositioning Schedule: 2 hours
Review the monitoring details input. Select Previous to correct or OK to confirm and start monitoring

Reposition
00:00 Remaining
High
Low
Repositioned Mute
REPOSITION ALERT WILL SOUND

SET "REPOSITIONING SCHEDULE"

PRESSURE ULCERS: PREVENTION AND MANAGEMENT OF PRESSURE ULCERS

FOAM MATTRESSES:

SEAT CUSHIONS:

DYNAMIC MATTRESSES:

HYBRID MATTRESS:

NICE Guidance

(NICE Guidelines: Published April 2014)

- 1.1.13 Use a high specification foam mattress for adults who are:
 - admitted to secondary care;
 - assessed as being at high risk of developing a pressure ulcer in primary and community care settings
- 1.1.16 Consider the seating needs of people at high risk of developing a pressure ulcer who are sitting for prolonged periods
- 1.1.17 Consider a high specification foam or equivalent pressure redistribution cushion for adults who sit for prolonged periods

CODES & ACCESSORIES



monitor



alert



protect

MAP™ Continuous In Bed Monitoring System

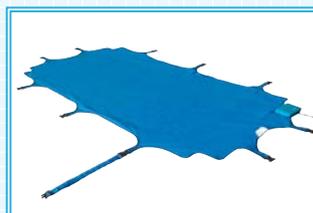
MAP/100

ACCESSORIES:

MAP™ Coverlet 5"	MAP/100/C5
MAP™ Coverlet 8"	MAP/100/C8

SPARE PARTS:

MAP™ Monitor	MAP/100/M
MAP™ Pressure Sensing Mat	MAP/100/PSM
MAP™ Monitor Holder	MAP/100/MH
MAP™ Extension Straps for Bariatric Bed (set of 5)	MAP/100/SB
MAP™ Horizontal Extension Strap Long	MAP/100/SL
MAP™ Horizontal Extension Strap Short	MAP/100/SS
MAP™ Vertical Extension Strap	MAP/100/SV
MAP™ Mains Cable	MAP/100/MC



MAP™ Pressure Sensing Mat



MAP™ Monitor



MAP™ Monitor Holder



MAP™ Reusable Coverlet

REFERENCES:

(1) *(Information from Health Service Thermometer, covering nursing homes, care homes, independent sector care providers, community nursing and hospitals).*

(2) *(Bennett, Dealey and Posnett, 2012)*

Case Studies are based on single facility findings. Individual results may vary. All studies available upon request or through our website.

M.A.P™ by Wellsense is an FDA Class I medical device intended for bedside pressure mapping under 21 C.F.R. 880.6450, 890.1600, and 880.2400.



...making it better

Sidhil Ltd, Sidhil Business Park, Holmfield,
Halifax, West Yorkshire HX2 9TN

Tel. +44 (0) 1422 233 000 / Fax. +44 (0) 1422 233 010

Email. sales@sidhil.com / Web. www.sidhil.com