

Utilizing Bedside Visual Feedback to Enhance Effective Repositioning

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Purpose/Problem

Health care professionals are challenged to effectively reposition patients to redistribute areas of high pressure to prevent the development of pressure ulcers (PU) and alleviate pressure from existing PUs to enhance healing. Without feedback to know what real-time pressure exists under a patient at any point in time, staff are unable to determine whether their repositioning is effective.

Objective

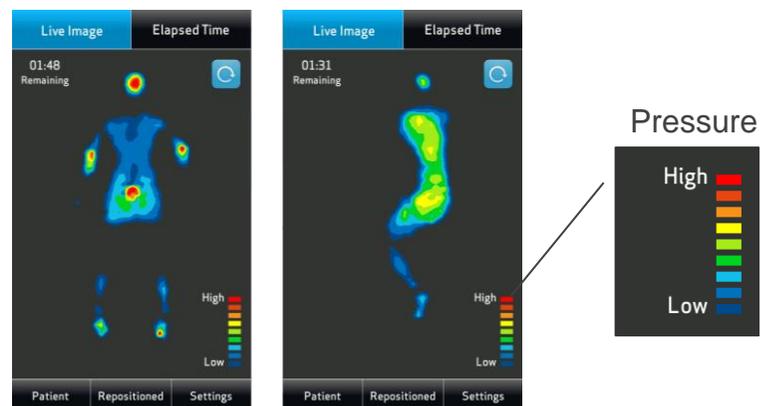
A bedside pressure mapping (BPM) system* was implemented at a long-term care facility to provide staff with visual feedback of real-time pressure and confirmation of lower pressures after repositioning patients, in order to determine if PU incidence can be reduced and PU healing enhanced.

References

1. Hanson D, Langemo D, Anderson J, Thompson P, Hunter S. Can pressure mapping prevent ulcers? *Nursing*. 2009; June: 50-51.
2. AHCPR Supported Guide and Guidelines [Internet]. Rockville (MD): Agency for Health Care Policy and Research (US); 1992-2008.
3. Ayello E, Lyder C. A New Era of Pressure Ulcer Accountability in Acute Care. *Adv Skin Wound Care*. 2008;21:134-40.

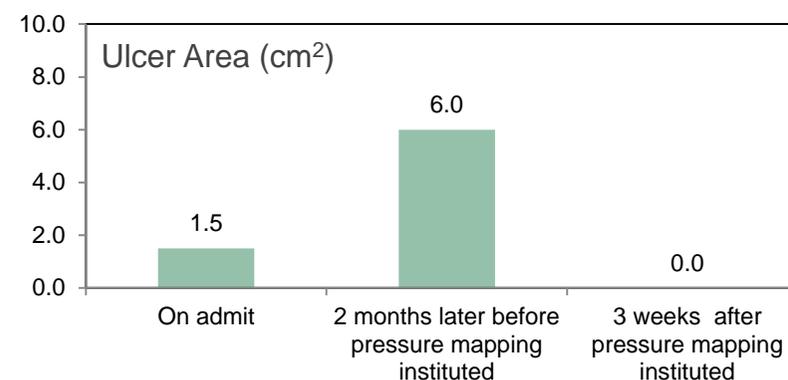
*The M.A.P.™ System, by Wellsense, USA, Inc., Nashville, TN
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Visual Feedback from the Bedside Pressure Mapping System*



Patient Case

65-year-old woman with history of bilateral CVA, diabetes, COPD, C. difficile infection, asthma, heparin-induced thrombocytopenia, dysphasia, J-tube, aphasia, and aspiration pneumonia



Case Outcomes

A geriatric female was admitted with a PU and a medical history that complicated wound healing and predisposed her to further PUs. The interdisciplinary team continued to monitor her nutrition, mobility, and wound care to promote wound healing. Despite careful attention to these areas, wound healing continued to be slow and complex. Two months later, the BPM system was added to her plan of care to allow for more precise positioning and redistribution of weight through the visualization of pressure points. After three weeks using the BPM system, the patient's PU closed completely.

Staff Feedback on the Bedside Pressure Mapping System*

“The MAP takes a lot of worry out of caring for the resident. You can see if positioning is right” - Tamra, LPN

“We can tell what areas have high pressure that you need to concentrate on. It is really helpful to know when we need to turn patients.” - Jennifer, CNA

“(A) Family was very ecstatic with resident's wound healing. It was our goal to send the resident home with intact skin and we were able to do just that.” - Kathy, RN, DON

Staff Survey Results

Statement	Agree
The MAP System provides for more efficient and effective patient repositioning.	100%
The MAP System can assist me with completing repositioning protocols.	100%
The MAP System can assist with improved pressure detection and relief.	100%

n=15 nursing and nursing assistant staff

Conclusions

The BPM system gives caregivers the visual feedback to effectively reposition long-term care patients. The caregivers are now actively engaged with patient repositioning as they can visualize real-time pressure points and position patients more precisely. In this case, the BPM system's visual feedback contributed to enhanced PU healing.